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June 15, 2015



State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
P.O. Box 100
Sacramento, California 95812-0100

Re: Bennett Petroleum, Inc.

Dear Ms. Crowl:

Please be advised that the undersigned is one of the attorneys representing Bennett Petroleum, Inc. as it relates and pertains to the Central Valley Regional Water Quality Control Board's May 15, 2015 Order served on Bennett Petroleum, Inc.

Petitioner: Bennett Petroleum hereby submits the following Petition for the State Water Resources Control Board's consideration:

PETITION FOR REVIEW:

1. BENNETT PETROLEUM, INC.'S PETITION TO REVIEW CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS TO PETITIONER
2. BENNETT PETROLEUM, INC.'S MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF ITS PETITION TO REVIEW CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS TO PETITIONER
3. DECLARATION OF GORDON M. SCHLITZ IN SUPPORT OF BENNETT PETROLEUM, INC.'S PETITION TO REVIEW CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO

RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS
TO PETITIONER

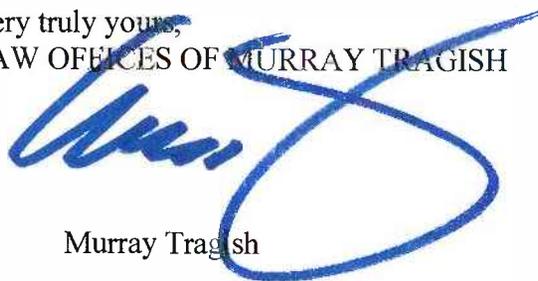
4. DECLARATION OF ROGER M. UHL IN SUPPORT OF BENNETT
PETROLEUM, INC.'S PETITION TO REVIEW CENTRAL VALLEY
REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER
PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO
RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS
TO PETITIONER

Please note that on June 15, 2015, copies of the above-referenced documents were sent to the State Water Resources Control Board Office of Chief Counsel via electronic mail to: waterqualitypetitions@waterboards.ca.gov, and via facsimile (without Exhibits, where applicable) to the State Water Resources Control Board Office of Chief Counsel at facsimile number: (916) 341-5199, pursuant to *Instructions for Filing Water Quality Petitions*.

In conjunction with the above Petition, and under separate cover, you shall receive Petitioner's Request for Hearing.

If you have any further questions concerning the foregoing, please do not hesitate to contact the undersigned.

Very truly yours,
LAW OFFICES OF MURRAY TRAGISH



Murray Tragish

MT/ab
Enclosures

Cc: Bennett Petroleum, Inc.
Ray T. Mullen, Esq.
Ron Holcomb - Central Valley Regional Water Quality Control Board (*via hand-delivery*)
Clay L Rodgers- Central Valley Regional Water Quality Control Board (*via hand-delivery*)

1 Murray Tragish, Esq., CSB #80759
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3 1405 Commercial Way, Suite 130
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5 Tel: (661) 324-2648
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7 Ray T. Mullen, Esq., CSB #111852
8 **LAW OFFICE OF RAY T. MULLEN**
9 1405 Commercial Way, Suite 130
10 Bakersfield, California 93309
11 Tel: (661) 631-1531
12 Fax: (661) 631-2427

13 Attorneys for Petitioner: Bennett Petroleum, Inc.

14 STATE OF CALIFORNIA
15 STATE WATER RESOURCES CONTROL BOARD

16 In Re:

17 BENNETT PETROLEUM, INC.,
18 Petitioner

19 Case No.

20 BENNETT PETROLEUM, INC.'S
21 PETITION TO REVIEW CENTRAL
22 VALLEY REGIONAL WATER QUALITY
23 CONTROL BOARD'S MAY 15, 2015
24 ORDER PURSUANT TO CALIFORNIA
25 WATER CODE SECTION 13267 AND TO
26 RESCIND, CANCEL AND WAIVE
27 REQUIREMENTS OF SAID ORDER AS TO
28 PETITIONER

19 Petitioner: BENNETT PETROLEUM, INC. does hereby respectfully submit its Petition in
20 accordance with California Water Code Section 13320 and California Code of Regulations Title 23,
21 Section 2050, to review Central Valley Regional Water Quality Control Board's May 15, 2015
22 Order, Pursuant To California Water Code Section 13267, and to request the within Board to
23 review, rescind, cancel and waive the requirements of said Order, based on the following:

- 24 1. Petitioner: Bennett Petroleum, Inc., 2212 Sully Court, Bakersfield, California 93311, (661)
25 204-2256; e-mail: rogersally.uhl@gmail.com, and all correspondence and communications

1 regarding this matter should be directed to Petitioner's attorneys as set forth above in this
2 Petition.

3 2. Petitioner requests the instant Board to review the Central Valley Regional Water Quality
4 Control Board Order, dated May 15, 2015, pursuant to California Water Code Section
5 13267, a copy of which is attached to this Petition as Exhibit "A", which by this reference is
6 incorporated as though set forth in full herein and throughout, and shall hereinafter be
7 referred to as the "Regional Water Order."

8
9 3. The Regional Water Order asserts that the California Division of Oil, Gas and Geothermal
10 Resources (hereinafter referred to as the "DOGGR") has informed the Central Valley
11 Regional Water Quality Control Board (hereinafter referred to as "Central Valley Water
12 Board") that this Petitioner has an injection Well that has been injecting fluids produced by
13 oil or gas extraction activities into an aquifer that may not have been properly designated as
14 an exempt aquifer under the Federal Safe Drinking Water Act. Further, the Central Valley
15 Water Board asserts that the alleged and purported aquifer may be suitable for drinking
16 water supply and other beneficial uses. (emphasis added)
17

18
19 4. The Regional Water Order further goes on to require that the Petitioner provide complex
20 and costly highly technical reports containing information about the injection Well, the fluid
21 that has been injected, the quality of the ground water within the zone(s) where the fluids
22 have been injected, and nearby water supply wells.

23
24 5. The Regional Water Order alleges that it has the authority to require the referenced complex
25 and costly highly technical reports pursuant to California Water Code Section 13267 on the
26 grounds that a regional board may investigate the quality of any waters of the State within
27 its region, however, any burden placed on the Petitioner, including costs "*of these reports*
28

1 shall bear a reasonable relationship to the need for the report and the benefits to be
2 obtained from the reports. In requiring those reports, the regional board shall provide the
3 person with a written explanation with regard to the need for the reports, and shall
4 identify the evidence that supports requiring that person to provide the reports.”

5 (emphasis added)
6

7 6. The Regional Water Order alleges that the basis for the need for the reports is “the
8 potential threat to human health and potential impacts to water quality posed by a
9 discharge of water associated with injection of fluids into aquifers that may be suitable
10 for drinking water or supply, and other beneficial uses.” (emphasis added)
11

12 7. As a result of the foregoing, the Regional Water Order requires that the Petitioner provide
13 by June 3, 2015, “a work plan that adequately described the procedures to collect a
14 representative groundwater sample from the injection zone(s) for the injection well
15 subject to this Order.” Further, by August 3, 2015, that Petitioner must submit a
16 complex, costly and highly technical report concerning the injection well.
17

18 8. The basis and requirements of the Regional Water Order as to this Petitioner, is
19 inappropriate, improper, without authorization, and has not met its burden of
20 requirements as to this Petitioner.
21

22 9. As further set forth in the supporting Declarations of Gordon M. Schlitz and Roger Uhl
23 and the Memorandum of Points and Authorities filed concurrently with the Petition, the
24 requirements under the Regional Water Order are inappropriate, improper, without
25 authority, and fails to meet its burden concerning the Aquifer not being exempt based on
26 the following facts:
27
28

- 1 a. There is only one injection Well, which is the subject of this Petition, and is referred
2 to as Mott Well #1, located in Section 9, Township 31 South, Range 29 East,
3 MDB&M, in the Mountain View Oilfield in Kern County. It was drilled in 1946 to
4 a total depth of 6,854 ft. and completed for production in the lower portion (Basal
5 Chanac) of the Kern River-Chanac Formation.
6
7 b. In 1974, the DOGGR approved conversion of the Mott Well #1 to water disposal in
8 the Kern River-Chanac Formation.
9
10 c. The DOGGR suspended the water disposal project in 1987, after the Mott Well #1
11 had been idle for more than two years, and the previous permit and approval to inject
12 into the Well was rescinded.
13
14 d. In January of 2000, the DOGGR declared the Mott Well #1 deserted and ordered its
15 abandonment to be undertaken by the State in the event the operator of record failed
16 to perform.
17
18 e. Petitioner acquired Mott Well #1 through the DOGGR (Orphan Well) Program in
19 September of 2003. After twenty-four months of evaluating its injection potential,
20 the Petitioner determined that it was not suitable for disposal of produced water, and
21 the Mott Well #1 was shut in. There has been no injection into the Well since
22 February of 2006. The Petitioner had injected a total of 7,636 barrels of injected
23 fluid over the 2 year period.
24
25 f. Based on a typical Kern River Chanac Formation sand, and assuming a conservative
26 porosity of 25%, and the injection interval of 332 ft., the theoretical impact distance
27 from the Mott Well #1 affected by the 7,636 barrels of injected fluid is less than a
28 thirteen foot radius and probably less than that given the very conservative formula

1 utilized by Mr. Schlitz. Further, the injection volume of 7,636 barrels, is less than
2 1/100th of a percent of the formation fluid in a quarter mile radius from the Mott
3 Well #1.

4 g. The 1981 DOGGR Application for Primacy in the Regulation of Class II Injection
5 Wells, under section 1425 (the Safe Drinking Water Act), had proposed that the
6 Kern River Formation in the Mountain View field as a Non-Hydrocarbon Producing
7 Zone Being Used For Water Disposal, in Appendix B, Table 1 (hereinafter referred
8 to as the "1981 Primacy Application) and is attached to the Declaration of Gordon
9 M. Schlitz.

10 h. The 1973 Edition of California Oil and Gas Fields/Volume 1, North and East
11 Central California (hereinafter referred to as the "1973 California Oil & Gas
12 Report") indicates that the Kern River Formation is designated as the Kern River-
13 Chanac Field (Undifferentiated) Formation. The 1975, and subsequent, DOGGR
14 annual reports include the Kern River-Chanac as an active water disposal zone for
15 the Main Area which includes the Mott Well #1. The reports list the Kern River as
16 an inactive water disposal zone for the Arvin and West Arvin areas of the Mountain
17 View Field.

18 i. Further, the locally designated Nichols and Hood Sands of the Kern River-Chanac
19 (Undifferentiated) Formation are listed as producing zones on the data sheets for the
20 Main Area of the Mountain View field in the 1973 Oil & Gas Edition.

21 j. It appears that the DOGGR was remiss in not including the Kern River/Chanac zone
22 in the 1981 Primacy Application, in Appendix B, Table 1, as a Non-Hydrocarbon
23
24
25
26
27
28

1 Producing Zone Being Used For Water Disposal in its application to the
2 Environmental Protection Agency.

3 k. In any event, the Mott Well #1 injection interval would fall within the depths of the
4 Nichols and Hood Sands, and should have been exempted as a hydrocarbon
5 producing zone as of 1973.
6

7 10. There is no benefit to the State to be obtained from the requested reports from the Petitioner,
8 and it appears that the only reason for the Regional Water Order is that the DOGGR
9 reported to the Central Valley Water Board that the Mott Well #1 may have been injecting
10 into an aquifer that may not have been properly designated as an exempt aquifer.

11 Notwithstanding the foregoing, the Mott Well #1 should have been exempted and in reality
12 it is exempted, and was permitted and allowed to dispose of water. The Central Valley
13 Water Board would almost certainly not have issued the Regional Water Order based solely
14 on an exempt aquifer but for a DOGGR report. Furthermore, the information from the
15 DOGGR was based on the Divisions failure to provide complete information in the 1981
16 Primacy Application in that the DOGGR did not include the Kern River/Chanac zone in
17 Appendix B, Table 1 of the Application as it was required and obligated to do. The
18 Petitioner now should not be burdened because of the DOGGR's failure to properly submit
19 its Application to the EPA.
20
21

22 11. Not only has there been minimal injection by the Petitioner of 7,636 barrels of injection
23 fluid over a two-year period, but there has been no injection or activity at the Mott Well #1
24 for over ten (10) years, and the injections were into exempt formations and thus no harm to
25 the State.
26
27
28

1 12. The benefits to be obtained from the complex, costly and highly technical information and
2 reports required by the Regional Water Order to purportedly better understand the potential
3 alleged threat to human health and potential impacts on water quality is without any basis
4 because the disposal was into an exempt formation, and is an overreach at best. The
5 injection of 7,636 barrels of produced water into the aquifer, more than 10 years ago, would
6 have been minuscule, in its affect on water quality and certainly would not be detectable
7 today. The same applies to 200,000 barrels injected thirty to forty years ago by the
8 Petitioner's predecessor-in-interest, who, if the Central Valley Water Board insists the
9 reports should be prepared, bear the burden of the costs of the requested reports.
10

11 13. Placing the burden for this report on the Petitioner does not bear a reasonable relationship to
12 the need for the report, and therefore are no benefits to be obtained from the report.
13

14 14. The Petitioner requests that the State of California Water Resources Control Board rescind,
15 cancel and waive any and all requirements pertaining to the Regional Water Order as to the
16 Petitioner.
17

18 15. In good faith, this Petitioner has submitted a work plan, albeit irrelevant based on the
19 foregoing statements and contentions, and is now required to submit the costly and highly
20 technical report by August 3, 2015 at an expense and cost estimated at between \$25,000.00
21 to \$30,000.00, and this Petitioner requests the Board to rescind, cancel and waive the
22 requirement of Petitioner to submit said report.
23

24 16. The Central Valley Regional Water Board issued its Regional Water Order without
25 opportunity or notice to provide a hearing or opportunity to object, and therefore, the within
26 Petition is being submitted, with a Petition to Stay which is filed concurrently with this
27 Petition.
28

17. In conjunction with the submittal of this Petition, copies have been sent to Ron Holcomb and Clay Rogers of the Central Valley Regional Water Quality Control Board by electronic mail and first class mail, at 1685 E. Street, Fresno, California 93706.

WHEREFORE, it is respectfully requested that the State of California Water Resources Control Board rescind, cancel and waive all requirements concerning the Central Valley Regional Water Quality Control Board May 15, 2015 Order, Pursuant To California Water Code Section 13267, and as it pertains to the submittal of any and all work plans and technical reports set forth therein, in this Petition.

Dated:

6/14/15

Respectfully submitted,
LAW OFFICES OF MURRAY TRAGISH
LAW OFFICE OF RAY T. MULLEN

By:

Murray Tragish, Attorneys for Petitioner:
Bennett Petroleum, Inc.

EXHIBIT A

PAGE _____ OF _____



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

15 May 2015

CERTIFIED MAIL
7014 1200 0000 3347 7258

Roger M. Uhl
Bennett Petroleum, Inc.
2212 Sully Court
Bakersfield, CA 93311

ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267. You are legally obligated to respond to this Order. Read this Order carefully.

Bennett Petroleum, Inc. is the operator of injection well identified as American Petroleum Institute (API) number 02914276 (hereinafter "injection well subject to this Order"). The California Division of Oil, Gas, and Geothermal Resources (Division) has informed the Central Valley Regional Water Quality Control Board (Central Valley Water Board) that the injection well subject to this Order has been injecting fluids produced by oil or gas extraction activities into an aquifer that may not have been properly designated as an exempt aquifer under the federal Safe Drinking Water Act (42 U.S.C. § 300f et seq.). The aquifer may be suitable for drinking water supply and other beneficial uses.

As described further below, for the injection well subject to this Order, Bennett Petroleum, Inc. is required to submit technical reports containing information about (1) the injection well, (2) the fluid that has been injected, (3) the quality of the groundwater within the zone(s) where fluids have been injected, and (4) nearby water supply wells. The issuance of this Order has been coordinated with the Division.

The Central Valley Water Board's authority to require technical reports derives from section 13267 of the California Water Code, which specifies, in part, that:

(a) A regional board...in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The Central Valley Water Board is concerned about the potential threat to human health and potential impacts to water quality posed by the discharge of waste associated with the injection of fluids into aquifers that may be suitable for drinking water supply and other beneficial uses. The technical information and reports required by this Order are necessary to assess the potential threat to human health and potential impacts to water quality. The need to understand the potential threat to human health and potential impacts to water quality justifies the need for the information and reports required by this Order. Based on the nature and possible consequences of the discharges of waste, the burden of providing the required information, including reporting costs, bears a reasonable relationship to the need for the report, and the benefits to be obtained. Bennett Petroleum, Inc. is required to submit this information and reports because it is the operator of the injection wells subject to this Order. If Bennett Petroleum, Inc. and its predecessors in interest have never injected fluids into the injection wells subject to this Order, please advise Central Valley Water Board staff of this in writing as soon as possible.

Under the authority of California Water Code section 13267, the Central Valley Water Board hereby orders Bennett Petroleum, Inc. to:

7. **By 3 June 2015** submit a work plan that adequately describes the procedures to collect a representative groundwater sample from the injection zone(s) for the injection well subject to this Order. If a representative sample cannot feasibly be collected from one or more of the injection zones for the injection well subject to this Order within the required timeframe (e.g., due to constraints posed by the design of the injection well), submit a technical report demonstrating that collection of a representative sample from those injection zones is not feasible within the required timeframe, and proposing an alternative sampling procedure and expeditious time schedule for obtaining a representative sample of groundwater from those injection zones. Alternative sampling procedures and time schedules are subject to approval by the Assistant Executive Officer of the Central Valley Water Board.
8. **By 3 August 2015** submit a technical report that contains all of the following information:
 - a. The analyses of each of the groundwater samples from the injection zone(s) for the injection well subject to this Order, in accordance with the water quality analysis and reporting requirements contained in Attachment A to this Order.
 - b. If fluids have been injected into the injection well subject to this Order, an analysis of a representative sample of those fluids in accordance with the water quality analysis and reporting requirements contained in Attachment A to this Order.
 - c. All available historical chemical analyses of the fluids injected into the injection well subject to this Order.
 - d. All previously obtained analytical data for groundwater samples collected from any injection zones within one (1) mile of the injection well subject to this Order.
 - e. A list and location map of all water supply wells within one mile of the injection well subject to this Order.
 - f. Information for each identified water supply well, including the well owner name and contact information; type of well (i.e., domestic, irrigation, industrial, etc.); whether any of the water is used for domestic purposes; status (i.e., active, idle, etc.); well construction; borehole geophysical logs; and all analytical results for any water sample(s) collected from each water supply well. Notify Central Valley Water Board staff within 24 hours upon

determination that any water supply well information cannot be obtained from the California Department of Water Resources because it is confidential.

- g. For the injection well subject to this Order, the following information for items A-O shall be submitted in a spreadsheet, labeled with the capital letters indicated. The information for items P-R shall be submitted as attachments:
- A. The name of the owner and/or operator of the injection well;
 - B. API number for the injection well;
 - C. Injection well name and number
 - D. Name of the field in which the injection well is located;
 - E. County in the which the injection well is located;
 - F. Latitude and Longitude (decimal degrees) of well head location;
 - G. Latitude and Longitude Datum, indicate "1" for North American Datum of 1983 or "2" for North American Datum of 1927;
 - H. Injection well total depth (feet);
 - I. Top injection depth (feet);
 - J. Formation/Zone name at top injection depth;
 - K. Bottom injection depth (feet);
 - L. Formation/Zone name at bottom injection depth;
 - M. Date injection started in the well (Day/Month/Year, xx/xx/xxxx);
 - N. Total injection volume in barrels by calendar year (to present day);
 - O. Attach well construction diagram including all perforations, annular material, and seals;
 - P. Attach a description of all sources of fluid injected;
 - Q. Attach all data maintained in compliance with California Code of Regulations, title 14, section 1724.10, subdivision (h).
 - R. Attach documentation associated with each mechanical integrity test undertaken to comply with California Code of Regulations, title 14, section 1724.10, subdivision (j).

All required work plans and technical information must be submitted in an electronic format compatible with the State's GeoTracker system following the requirements of California Code of Regulations, title 23, section 3893 (available at http://www.waterboards.ca.gov/ust/electronic_submittal/docs/text_regs.pdf). A unique case identifier (Global ID) is assigned for each well subject to this Order contained in Attachment B.

Based on the information submitted in the work plan and/or technical report, additional information or action may be required.

Additionally, please submit a hard copy to the attention of:

Ron Holcomb
Central Valley Water Board
1685 E Street
Fresno, CA 93706

All information is to be copied to the Division, to the attention of:

Steven R. Bohlen, State Oil and Gas Supervisor
Department of Conservation, DOGGR
801 K Street
Sacramento, CA 95814-3500

Submissions pursuant to this Order need to include the following statement signed by an authorized representative of Bennett Petroleum, Inc.:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The failure to furnish the required report, or the submission of a substantially incomplete report or false information, is a misdemeanor, and may result in additional enforcement actions, including issuance of an Administrative Civil Liability Complaint pursuant to California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Any person aggrieved by this Order of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320. The State Water Board must receive the petition by 5:00 p.m., within 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations, and instructions applicable to filing petitions, are at http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml, or will be provided upon request.

Be advised that sections 13260 and 13264 of the California Water Code require any person who proposes to discharge waste that could affect waters of the state to submit a Report of Waste Discharge for any new discharge or change in the character, volume, or location of an existing discharge. Fluids produced by oil or gas extraction activities that can no longer be disposed of in the injection wells subject to this Order cannot be discharged to land or waters of the state prior to the issuance of Waste Discharge Requirements, and cannot be discharged to waters of the United States prior to the issuance of an National Pollutant Discharge Elimination System (NPDES) Permit. Failure to comply with these requirements may constitute a misdemeanor under Water Code section 13265 or a felony under Water Code section 13387, and may also subject Bennett Petroleum, Inc. to judicial or administrative civil liabilities.

Roger M. Uhl
Bennett Petroleum, Inc.

- 5 -

15 May 2015

Any questions regarding this matter should be directed to me at (559) 445-5116 or at Clay.Rodgers@waterboards.ca.gov.



Clay L. Rodgers
Assistant Executive Officer

Enclosure:

Attachment A - Water Quality Sampling, Analysis and Reporting

Attachment B - GeoTracker Upload Instructions and Assigned Global Identification Number(s)

ATTACHMENT A
Water Quality Sampling, Analysis, and Reporting

Water Quality Sampling

All groundwater sampling is to be performed by a qualified person. A qualified person is any person with the knowledge and training in proper sampling methods, chain of custody, and quality assurance/quality control protocols. Any person conducting groundwater sampling, other than personnel from a certified laboratory, shall consult with the certified laboratory to ensure that the sampler understands and follows the proper sampling collection procedures and protocols. All procedures to sample groundwater supply wells shall be consistent with US EPA Science and Ecosystem Support Division Operating Procedure for Groundwater Sampling (March 2013) (available at <http://www.epa.gov/region4/sesd/fbqstp/Groundwater-Sampling.pdf>).

Water Quality Analysis

Groundwater samples collected from wells and injection zones shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program, using current applicable EPA-approved analytical methods. The methods of analysis and the detection limits used shall be appropriate for the expected concentrations. The analytical method having the lowest method detection limit (MDL) shall be selected from among those methods that would provide valid results in light of any matrix effects or interferences. Analyze samples for the following:

- A. Total dissolved solids.
- B. Metals listed in California Code of Regulations, title 22, section 66261.24, subdivision (a)(2)(A)
- C. Benzene, toluene, ethylbenzene, and xylenes
- D. Total petroleum hydrocarbons for crude oil
- E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene)
- F. Radionuclides listed under California Code of Regulations, title 22, Table 64442, which includes Gross Alpha particle activity (excluding radon and uranium), Uranium, Radium-226, and Radium-228.
- G. Methane
- H. Major and minor cations (including sodium, potassium, magnesium, and calcium)
- I. Major and minor anions (including nitrate, chloride, sulfate, alkalinity, and bromide)
- J. Trace elements (including lithium, strontium, boron, iron, and manganese)

Water Quality Reporting

Work plans, and technical reports and associated data shall be uploaded in an electronic format compatible with the State's GeoTracker system.

Technical Report that includes

- Site plan with the location(s) of the wells sampled
- Description of field sampling procedures
- Copies of analytical laboratory reports, including quality assurance/quality control procedures and analytical test methods.
- Waste management and disposal procedures
- Table(s) of analytical results organized by well number (including API number).
- A list and location map of all the water supply wells located within a one mile radius of the injection well(s)

All GeoTracker uploads should consist of a GeoReport, GeoMap(s), and an EDF of laboratory data, if applicable.

ATTACHMENT B
GeoTracker Upload Instructions and Assigned Global Identification Number(s)

Work plans, and technical reports and associated data shall be uploaded in an electronic format compatible with the State's GeoTracker system. To begin the process:

- Log in or create a password
- Claim your site(s) (i.e. global ID)
- Add field point name(s)
- Upload the following:
 - Work plan/Technical report and associated data (GeoReport)
 - *laboratory report (EDF)
 - *Site Maps (GeoMAP)

For more information, please contact the GeoTracker Help Desk at Geotracker@waterboards.ca.gov or (866) 480-1028.

Injection Well	Assigned Global ID number
02914276	T10000006844

*GeoTracker submittal may not be required for all document types.

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF KERN

I am a citizen of the United States and employed in the County of Kern, State of California and my business address is 1405 Commercial Way, Suite 130, Bakersfield, California 93309; I am over the age of eighteen and not a party to the within entitled action.

On **June 15, 2015**, I served the following document(s) described as: **BENNETT PETROLEUM, INC.'S PETITION TO REVIEW CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS TO PETITIONER** on the interested parties to said action or through their attorneys of record, by placing a true copy thereof in a sealed envelope, addressed as shown below, by the following means:

X **By Electronic Filing Service** - Complying with California Code of Civil Procedure §1010.6, I caused each such document(s) to be electronically served on the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
E-Mail: waterqualitypetitions@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Ron Holcomb
E-Mail: Ronald.Holcomb@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Clay L. Rodgers
E-Mail: Clay.Rodgers@waterboards.ca.gov

X **By First Class Mail** - I caused each such envelope, with first class postage thereon fully prepaid, to be deposited in a recognized place of deposit of the U.S. Mail in Bakersfield, California, for collection to the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
P.O. Box 100
Sacramento, California 95812-0100

X **By Personal Service** - I caused each such envelope to be personally delivered by hand to the addressee(s) shown below:

Central Valley Regional Water
Quality Control Board
Attention: Ron Holcomb
1685 "E" Street

Central Valley Regional Water
Quality Control Board
Attention: Clay L. Rodgers
1685 "E" Street

Fresno, California 93706

Fresno, California 93706

X **By Facsimile Transmission** - (Where permitted) I transmitted a true copy thereof (without Exhibits, were applicable, pursuant to *Instructions for Filing Water Quality Petitions*) by facsimile transmission from facsimile number (661) 631-2427, to the interested parties to said action at the fax number(s) shown below.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
Facsimile: (916) 341-5199

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am employed in the office of a member of the Bar of this Court at whose direction the service was made. Executed on **June 15, 2015**, at Bakersfield, California, County of Kern.


Amy Belyeu

1 Murray Tragish, Esq., CSB #80759
2 **LAW OFFICES OF MURRAY TRAGISH**
3 1405 Commercial Way, Suite 130
4 Bakersfield, California 93309
5 Tel: (661) 324-2648
6 Fax: (661) 324-2654

7 Ray T. Mullen, Esq., CSB #111852
8 **LAW OFFICE OF RAY T. MULLEN**
9 1405 Commercial Way, Suite 130
10 Bakersfield, California 93309
11 Tel: (661) 631-1531
12 Fax: (661) 631-2427

13 Attorneys for Petitioner: Bennett Petroleum, Inc.

14 STATE OF CALIFORNIA
15 STATE WATER RESOURCES CONTROL BOARD

16 In Re:

17 BENNETT PETROLEUM, INC.,
18
19 Petitioner

20 Case No.

21 BENNETT PETROLEUM, INC.'S
22 MEMORANDUM OF POINTS AND
23 AUTHORITIES IN SUPPORT OF ITS
24 PETITION TO REVIEW THE CENTRAL
25 VALLEY REGIONAL WATER QUALITY
26 CONTROL BOARD'S MAY 15, 2015
27 ORDER PURSUANT TO CALIFORNIA
28 WATER CODE SECTION 13267 AND TO
RESCIND, CANCEL AND WAIVE
REQUIREMENTS OF SAID ORDER AS TO
PETITIONER

Petitioner: BENNETT PETROLEUM, INC. does hereby respectfully submit its Memorandum of Points and Authorities in Support of Its Petition to Review Central Valley Regional Water Quality Control Board's May 15, 2015 Order Pursuant to California Water Code Section 13267 and to Rescind, Cancel and Waive Requirements of Said Order as to Petitioner.

I. THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD MAY 15, 2015 ORDER DOES NOT COMPLY WITH THE REQUIREMENTS OF CALIFORNIA WATER CODE SECTION 13267(a)(b)(1).

1 California Water Code section 13267(a) provides that “*a regional board in establishing or*
2 *reviewing any water quality control plan or waste discharge requirements, or in connection with*
3 *any action relating to any plan or requirement authorized by this division, may investigate the*
4 *quality of any waters of the State within its region.*”

5 California Water Code section 13267 goes onto state that it has the power to require “*technical*
6 *or monitoring program reports which regional board requires*”.

7
8 However, California Water Code section 13267(b)(1) states the conditions in which the regional
9 board may require technical or monitoring program reports wherein it states “*the burden, including*
10 *costs of these reports shall be at a reasonable relationship to the need for the report and the benefits*
11 *to be obtained from the reports. In requiring these reports the regional board shall provide the*
12 *person with a written explanation with regard to the need for the reports and shall identify the*
13 *evidence that supports requiring that person to provide the reports.*” (emphasis added)

14
15 The Central Valley Regional Water Quality Control Board (hereinafter referred to as the
16 “Central Valley Water Board”), May 15, 2015 Order Pursuant To California Water Code Section
17 13267, which is attached as a copy to the Petition and the Declaration of Roger Uhl filed
18 concurrently herewith, and hereinafter referred to as the “Regional Water Order”, in relying on its
19 authority pursuant to California Water Code section 13267, the Board states in its Order the basis
20 for requiring complex, costly and highly technical reports from the Petitioner, that the California
21 Division of Oil, Gas & Geothermal Resources (“DOGGR”), had informed the Central Valley Water
22 Board that the Mott Well #1 had “*injecting fluids produced by oil or gas extraction activities into an*
23 *aquifer that may not have been properly designated as an exempt aquifer under the Federal Safe*
24 *Drinking Water Act (42 U.S.C. Section 300f, et seq.). The aquifer may be suitable for drinking*
25 *water supply and other beneficial uses.*” (emphasis added)

1 Nowhere to be found in the Regional Water Order is there any identification of evidence that
2 supports the Central Valley Water Board's Order and allegation that the Mott Well #1 had been
3 injecting water into an aquifer that may not have been designated as an exempt aquifer.

4 Further, as indicated in the Declaration of Gordon M. Schlitz, there is significant evidence and
5 factual substantiation that the aquifer in question in which the Mott Well #1 had been injecting
6 water, was in fact exempt formations. Again, nowhere to be found is there any explanation or
7 identification of evidence that the Central Valley Water Board had investigated or engaged in any
8 research to make its broad and overarching allegations that the aquifer was not exempt, especially in
9 view of the previous approval, allowance and permission to the Petitioner to utilize the Mott Well
10 #1 injection Well.
11

12
13 **II. THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD MAY**
14 **15, 2015 ORDER FOR TECHNICAL OR MONITORING PROGRAMS, FAILS TO**
15 **PROVIDE A REASONABLE RELATIONSHIP TO THE NEED FOR THE REPORT AND**
16 **THE BENEFITS TO BE OBTAINED.**

17 California Water Code section 13267 in describing the conditions under which a regional water
18 would issue, provides in California Water Code section 13267(b)(1) that "*the burden, including*
19 *costs of these reports shall be a reasonable relationship to the need for the report and the benefits to*
20 *be obtained from the reports.*" (emphasis added)

21 The Central Valley Water Board in its Order further alleges that the DOGGR had "*informed the*
22 *Central Valley Regional Water Quality Control Board (Central Valley Water Board) that the*
23 *injection well subject to this Order has been injecting fluids produced by oil or gas extraction*
24 *activities into an aquifer that may not have been properly designated as an exempt aquifer under*
25 *the Federal Safe Drinking Water Act*". (emphasis added) Notwithstanding the fact that the
26 designation of the subject aquifer and its location is exempt and that DOGGR did not report to the
27 Environmental Protection Agency through its 1981 Application for Primacy in the Regulation of
28

1 Class II Injections Wells Under Section 1425 (Safe Drinking Water Act), that the formation in
2 which the State is now asserting on information and belief that it is non-exempt, the failure to
3 properly assess the classification should not be the Petitioner's burden, but that of the reporting
4 person, persons or entities burden and expense and cost.

5 Assuming for purposes of argument that if in fact there is a need for technical or monitoring
6 programs, which it is asserted is not necessary for the Mott Well #1, the reasonable relationship for
7 the need for potential technical reports should be submitted to the DOGGR and/or the individual
8 and/or parties which were instrumental in creating the inadvertent failure to list the aquifer as
9 exempt, and again especially in view of the previous approval, allowance and permission from the
10 State to the Petitioner to utilize the Mott Well #1 as an injection Well. There is no reasonable
11 relationship for the report and is burden to be placed on the Petitioner when the burden should be
12 placed with the governmental agency responsible for the inadvertence or the conduct on which the
13 alleged and purported misclassification had taken place, and the Regional Water Order is based on
14 the unsupported supposition that the Petitioner is required to bear the cost and expense caused by
15 others.
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19 Again, there is no information to be found in the Regional Water Order for the basis of the
20 DOGGR's information that was provided to the Central Valley Water Board, which in and of itself
21 renders the Regional Water Order as being inadequate as to its notice and advisement to the general
22 public, and more significantly to the Petitioner regarding the reasonable relationship of the report to
23 the activities which may have created the classification of the exempt and/or non-exempt aquifer.
24

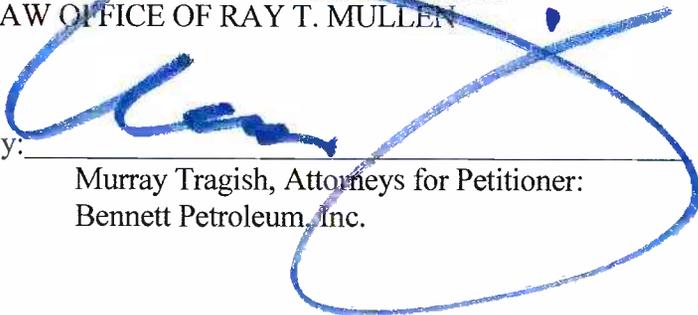
25 **III. CONCLUSION.**

26 Based on the foregoing, it is respectfully submitted that the State in its review of the Regional
27 Water Order, should rescind, cancel and waive requirements of said Order as to Petitioner.
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Dated: 6/14/11

Respectfully submitted,
LAW OFFICES OF MURRAY TRAGISH
LAW OFFICE OF RAY T. MULLEN

By: 
Murray Tragish, Attorneys for Petitioner:
Bennett Petroleum, Inc.

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF KERN

I am a citizen of the United States and employed in the County of Kern, State of California and my business address is 1405 Commercial Way, Suite 130, Bakersfield, California 93309; I am over the age of eighteen and not a party to the within entitled action.

On **June 15, 2015**, I served the following document(s) described as: **BENNETT PETROLEUM, INC.'S MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF ITS PETITION TO REVIEW THE CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS TO PETITIONER** on the interested parties to said action or through their attorneys of record, by placing a true copy thereof in a sealed envelope, addressed as shown below, by the following means:

X **By Electronic Filing Service** - Complying with California Code of Civil Procedure §1010.6, I caused each such document(s) to be electronically served on the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
E-Mail: waterqualitypetitions@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Ron Holcomb
E-Mail: Ronald.Holcomb@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Clay L. Rodgers
E-Mail: Clay.Rodgers@waterboards.ca.gov

X **By First Class Mail** - I caused each such envelope, with first class postage thereon fully prepaid, to be deposited in a recognized place of deposit of the U.S. Mail in Bakersfield, California, for collection to the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
P.O. Box 100
Sacramento, California 95812-0100

X **By Personal Service** - I caused each such envelope to be personally delivered by hand to the addressee(s) shown below:

Central Valley Regional Water
Quality Control Board
Attention: Ron Holcomb

Central Valley Regional Water
Quality Control Board
Attention: Clay L. Rodgers

1685 "E" Street
Fresno, California 93706

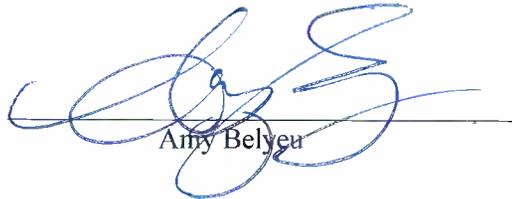
1685 "E" Street
Fresno, California 93706

X

By Facsimile Transmission - (Where permitted) I transmitted a true copy thereof (without Exhibits, where applicable, pursuant to *Instructions for Filing Water Quality Petitions*) by facsimile transmission from facsimile number (661) 631-2427, to the interested parties to said action at the fax number(s) shown below.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
Facsimile: (916) 341-5199

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am employed in the office of a member of the Bar of this Court at whose direction the service was made. Executed on **June 15, 2015**, at Bakersfield, California, County of Kern.


Amy Belyeu

1 Murray Tragish, Esq., CSB #80759
2 **LAW OFFICES OF MURRAY TRAGISH**
3 1405 Commercial Way, Suite 130
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5 Tel: (661) 324-2648
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11 Tel: (661) 631-1531
12 Fax: (661) 631-2427

13 Attorneys for Petitioner: Bennett Petroleum, Inc.

14 STATE OF CALIFORNIA
15 STATE WATER RESOURCES CONTROL BOARD

16 In Re:

17 BENNETT PETROLEUM, INC.,
18
19 Petitioner

20 Case No.

21 DECLARATION OF ROGER M. UHL IN
22 SUPPORT OF BENNETT PETROLEUM,
23 INC.'S PETITION TO REVIEW CENTRAL
24 VALLEY REGIONAL WATER QUALITY
25 CONTROL BOARD'S MAY 15, 2015
26 ORDER PURSUANT TO CALIFORNIA
27 WATER CODE SECTION 13267 AND TO
28 RESCIND, CANCEL AND WAIVE
REQUIREMENTS OF SAID ORDER AS TO
PETITIONER

I, Roger M. Uhl, do hereby state and declare as follows:

1. I have personal knowledge of each of the matters stated herein, except where the text states otherwise, and if called as a witness could, and would, competently testify thereto.

2. This Declarant is the President of Bennett Petroleum, Inc. ("Bennett"), which is the current owner of the Mott Well #1, which is located in Section 9, Township 31 South, Range 29 East, MDB&M, in the Mountain View Oilfield in Kern County ("Mott 1").

3. Petitioner requests the instant Board to review the Central Valley Regional Water Quality Control Board Order, dated May 15, 2015, pursuant to California Water Code Section

1 13267, a copy of which is attached to this Declaration as Exhibit "A", which by this reference is
2 incorporated as though set forth in full herein and throughout, and shall hereinafter be referred to as
3 the "Regional Water Order."

4 4. The Regional Water Order asserts that the California Division of Oil, Gas and
5 Geothermal Resources (hereinafter referred to as the "DOGGR") has informed the Central Valley
6 Regional Water Quality Control Board (hereinafter referred to as "Central Valley Water Board")
7 that this Petitioner has an injection Well that has been injecting fluids produced by oil or gas
8 extraction activities into an aquifer that may not have been properly designated as an exempt
9 aquifer under the Federal Safe Drinking Water Act. Further, the Central Valley Water Board
10 asserts that the alleged and purported aquifer may be suitable for drinking water supply and other
11 beneficial uses. (emphasis added)
12
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14 5. The Regional Water Order further goes on to require that the Petitioner provide
15 complex and costly highly technical reports containing information about the injection Well, the
16 fluid that has been injected, the quality of the ground water within the zone(s) where the fluids
17 have been injected, and nearby water supply wells.
18

19 6. The Regional Water Order alleges that it has the authority to require the referenced
20 complex and costly highly technical reports pursuant to California Water Code Section 13267 on
21 the grounds that a regional board may investigate the quality of any waters of the State within its
22 region, however, any burden placed on the Petitioner, including costs "of these reports shall bear a
23 reasonable relationship to the need for the report and the benefits to be obtained from the reports.
24 *In requiring those reports, the regional board shall provide the person with a written*
25 *explanation with regard to the need for the reports, and shall identify the evidence that supports*
26 *requiring that person to provide the reports."* (emphasis added)
27
28

1 7. The Regional Water Order alleges that the basis for the need for the reports is “the
2 potential threat to human health and potential impacts to water quality posed by a discharge of
3 water associated with injection of fluids into aquifers that may be suitable for drinking water or
4 supply, and other beneficial uses.” (emphasis added)

5 8. As a result of the foregoing, the Regional Water Order requires that the Petitioner
6 provide by June 3, 2015, “*a work plan that adequately described the procedures to collect a*
7 *representative groundwater sample from the injection zone(s) for the injection well subject to*
8 *this Order.*” Further, by August 3, 2015, that Petitioner must submit complex, costly and highly
9 technical report concerning the injection well.
10

11 9. As further set forth in the supporting Declaration of Gordon M. Schlitz filed
12 concurrently with the Petition, the requirements under the Regional Water Order are
13 inappropriate, improper, without authority, and fails to meet its burden concerning the Aquifer
14 not being exempt based on the following facts:
15

- 16 a. There is only one injection Well, which is the subject of this Petition, and is referred
17 to as Mott Well #1, located in Section 9, Township 31 South, Range 29 East,
18 MDB&M, in the Mountain View Oilfield in Kern County. It was drilled in 1946 to
19 a total depth of 6,854 ft. and completed for production in the lower portion (Basal
20 Chanac) of the Kern River-Chanac Formation.
21 b. In 1974, the DOGGR approved conversion of the Mott Well #1 to water disposal in
22 the Kern River-Chanac Formation.
23 c. The DOGGR suspended the water disposal project in 1987, after the Mott Well #1
24 had been idle for more than two years, and the previous permit and approval to inject
25 into the Well was rescinded.
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- 1 d. In January of 2000, the DOGGR declared the Mott Well #1 deserted and ordered its
2 abandonment to be undertaken by the State in the event the operator of record failed
3 to perform.
- 4 e. Petitioner acquired Mott Well #1 through the DOGGR (Orphan Well) Program in
5 September of 2003. After twenty-four months of evaluating its injection potential,
6 the Petitioner determined that it was not suitable for disposal of produced water, and
7 the Mott Well #1 was shut in. There has been no injection into the Well since
8 February of 2006. The Petitioner had injected a total of 7,636 barrels of injected
9 fluid over the 2 year period.
- 10 f. Based on a typical Kern River Chanac Formation sand, and assuming a conservative
11 porosity of 25%, and the injection interval of 332 ft., the theoretical impact distance
12 from the Mott Well #1 affected by the 7,636 barrels of injected fluid is less than a
13 thirteen foot radius and probably less than that given the very conservative formula
14 utilized by Mr. Schlitz. Further, the injection volume of 7,636 barrels, is less than
15 1/100th of a percent of the formation fluid in the quarter mile radius from the Mott
16 Well #1.
- 17 g. The 1981 DOGGR Application for Primacy in the Regulation of Class II Injection
18 Wells, under section 1425 (the Safe Drinking Water Act), had proposed that the
19 Kern River Formation in the Mountain View field as a Non-Hydrocarbon Producing
20 Zone Being Used For Water Disposal, in Appendix B, Table 1 (hereinafter referred
21 to as the "1981 Primacy Application") and is attached to the Declaration of Gordon
22 M. Schlitz.
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1 h. The 1973 Edition of California Oil and Gas Fields/Volume 1, North and East
2 Central California (hereinafter referred to as the "1973 California Oil & Gas
3 Report") indicates that the Kern River Formation is designated as the Kern River-
4 Chanac Field (Undifferentiated) Formation. The 1975, and subsequent, DOGGR
5 annual reports include the Kern River-Chanac as an active water disposal zone for
6 the Main Area which includes the Mott Well #1. The reports list the Kern River as
7 an inactive water disposal zone for the Arvin and West Arvin areas of the Mountain
8 View Field.
9

10 i. Further, the locally designated Nichols and Hood Sands of the Kern River-Chanac
11 (Undifferentiated) Formation are listed as producing zones on the data sheets for the
12 Main Area of the Mountain View field in the 1973 Oil & Gas Edition.
13

14 j. It appears that the DOGGR was remiss in not including the Kern River-Chanac zone
15 in the 1981 Primacy Application, in Appendix B, Table 1, as a Non-Hydrocarbon
16 Producing Zone Being Used For Water Disposal in its application to the
17 Environmental Protection Agency.
18

19 k. In any event, the Mott Well #1 injection interval would fall within the depths of the
20 Nichols and Hood Sands, and should have been exempted as a hydrocarbon
21 producing zone as of 1973.
22

23 10. There is no benefit to the State to be obtained from the requested reports from the
24 Petitioner, and it appears that the only reason for the Regional Water Order is that the DOGGR
25 reported to the Central Valley Water Board that the Mott Well #1 may have been injecting into an
26 aquifer that may not have been properly designated as an exempt aquifer. Notwithstanding the
27 foregoing the Mott Well #1 should have been exempted and in reality it is exempted, and was
28

1 permitted and allowed to dispose of water. The Central Valley Water Board would almost certainly
2 not have issued the Regional Water Order based solely on an exempt aquifer but for a DOGGR
3 report. Furthermore, the information from the DOGGR was based on the Divisions failure to
4 provide complete information in the 1981 Primacy Application in that the DOGGR did not include
5 the Kern River/Chanac zone in Appendix B, Table 1 of the Application as it was required and
6 obligated to do. The Petitioner now should not be burdened because of the DOGGR's failure to
7 properly coordinate its Application to the EPA.
8

9 11. Not only has there been minimal injection by the Petitioner of 7,636 barrels of
10 injection fluid over a two-year period, but there has been no injection or activity at the Mott Well #1
11 for over ten (10) years, and the injections were into exempt formations and thus no harm to the
12 State.
13

14 12. The benefits to be obtained from the complex, costly and highly technical
15 information and reports required by the Regional Water Order to purportedly better understand the
16 potential alleged threat to human health and potential impacts on water quality is without any basis
17 because the disposal was into an exempt formation, and is an overreach at best. The injection of
18 7,636 barrels of produced water into the aquifer, more than 10 years ago, would have been
19 minuscule, in its affect on water quality and certainly would not be detectable today. The same
20 applies to 200,000 barrels injected thirty to forty years ago by the Petitioner's predecessor-in-
21 interest, who, if the Central Valley Water Board insists the reports should be prepared, bear the
22 burden of the costs of the requested reports.
23
24

25 13. Placing the burden for this report on the Petitioner does not bear a reasonable
26 relationship to the need for the report, and therefore are no benefits to be obtained from the report.
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28

1 14. The Petitioner requests that the State of California Water Resources Control Board
2 rescind, cancel and waive any and all requirements pertaining to the Regional Water Order as to the
3 Petitioner.

4 15. In good faith, this Petitioner has submitted a work plan, albeit irrelevant based on the
5 foregoing statements and contentions, and is now required to submit the costly and highly technical
6 report by August 3, 2015, and this Petitioner requests the Board to rescind, cancel and waive the
7 requirement of Petitioner to submit said report.
8

9 16. The Central Valley Regional Water Board issued its Regional Water Order without
10 opportunity or notice to provide a hearing or opportunity to object, and therefore, the within Petition
11 is being submitted, with a Petition to Stay which is filed concurrently with this Petition.
12

13 17. In conjunction with the submittal of this Petition, copies have been sent to Ron
14 Holcomb and Clay Rogers of the Central Valley Regional Water Quality Control Board by
15 electronic mail and first class mail, at 1685 E. Street, Fresno, California 93706.
16

17 18. It is respectfully requested that the State of California Water Resources Control
18 Board rescind, cancel and waive all requirements concerning the Central Valley Regional Water
19 Quality Control Board May 15, 2015 Order, pursuant to California Water Code Section 13267, and
20 as it pertains to the submittal of any and all work plans and technical reports set forth therein, as to
21 this Petition.
22

23 I declare under penalty of perjury, under the laws of the State of California, that the foregoing is
24 true and correct. Executed in Bakersfield, California on this 14th day of June, 2015
25

26 
27 Roger M. Uhl
28

EXHIBIT A

PAGE _____ OF _____



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

15 May 2015

CERTIFIED MAIL

7014 1200 0000 3347 7258

Roger M. Uhl
Bennett Petroleum, Inc.
2212 Sully Court
Bakersfield, CA 93311

ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267. You are legally obligated to respond to this Order. Read this Order carefully.

Bennett Petroleum, Inc. is the operator of injection well identified as American Petroleum Institute (API) number 02914276 (hereinafter "injection well subject to this Order"). The California Division of Oil, Gas, and Geothermal Resources (Division) has informed the Central Valley Regional Water Quality Control Board (Central Valley Water Board) that the injection well subject to this Order has been injecting fluids produced by oil or gas extraction activities into an aquifer that may not have been properly designated as an exempt aquifer under the federal Safe Drinking Water Act (42 U.S.C. § 300f et seq.). The aquifer may be suitable for drinking water supply and other beneficial uses.

As described further below, for the injection well subject to this Order, Bennett Petroleum, Inc. is required to submit technical reports containing information about (1) the injection well, (2) the fluid that has been injected, (3) the quality of the groundwater within the zone(s) where fluids have been injected, and (4) nearby water supply wells. The issuance of this Order has been coordinated with the Division.

The Central Valley Water Board's authority to require technical reports derives from section 13267 of the California Water Code, which specifies, in part, that:

(a) A regional board...in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.

(b)(1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The Central Valley Water Board is concerned about the potential threat to human health and potential impacts to water quality posed by the discharge of waste associated with the injection of fluids into aquifers that may be suitable for drinking water supply and other beneficial uses. The technical information and reports required by this Order are necessary to assess the potential threat to human health and potential impacts to water quality. The need to understand the potential threat to human health and potential impacts to water quality justifies the need for the information and reports required by this Order. Based on the nature and possible consequences of the discharges of waste, the burden of providing the required information, including reporting costs, bears a reasonable relationship to the need for the report, and the benefits to be obtained. Bennett Petroleum, Inc. is required to submit this information and reports because it is the operator of the injection wells subject to this Order. If Bennett Petroleum, Inc. and its predecessors in interest have never injected fluids into the injection wells subject to this Order, please advise Central Valley Water Board staff of this in writing as soon as possible.

Under the authority of California Water Code section 13267, the Central Valley Water Board hereby orders Bennett Petroleum, Inc. to:

7. **By 3 June 2015** submit a work plan that adequately describes the procedures to collect a representative groundwater sample from the injection zone(s) for the injection well subject to this Order. If a representative sample cannot feasibly be collected from one or more of the injection zones for the injection well subject to this Order within the required timeframe (e.g., due to constraints posed by the design of the injection well), submit a technical report demonstrating that collection of a representative sample from those injection zones is not feasible within the required timeframe, and proposing an alternative sampling procedure and expeditious time schedule for obtaining a representative sample of groundwater from those injection zones. Alternative sampling procedures and time schedules are subject to approval by the Assistant Executive Officer of the Central Valley Water Board.
8. **By 3 August 2015** submit a technical report that contains all of the following information:
 - a. The analyses of each of the groundwater samples from the injection zone(s) for the injection well subject to this Order, in accordance with the water quality analysis and reporting requirements contained in Attachment A to this Order.
 - b. If fluids have been injected into the injection well subject to this Order, an analysis of a representative sample of those fluids in accordance with the water quality analysis and reporting requirements contained in Attachment A to this Order.
 - c. All available historical chemical analyses of the fluids injected into the injection well subject to this Order.
 - d. All previously obtained analytical data for groundwater samples collected from any injection zones within one (1) mile of the injection well subject to this Order.
 - e. A list and location map of all water supply wells within one mile of the injection well subject to this Order.
 - f. Information for each identified water supply well, including the well owner name and contact information; type of well (i.e., domestic, irrigation, industrial, etc.); whether any of the water is used for domestic purposes; status (i.e., active, idle, etc.); well construction; borehole geophysical logs; and all analytical results for any water sample(s) collected from each water supply well. Notify Central Valley Water Board staff within 24 hours upon

determination that any water supply well information cannot be obtained from the California Department of Water Resources because it is confidential.

- g. For the injection well subject to this Order, the following information for items A-O shall be submitted in a spreadsheet, labeled with the capital letters indicated. The information for items P-R shall be submitted as attachments:
- A. The name of the owner and/or operator of the injection well;
 - B. API number for the injection well;
 - C. Injection well name and number
 - D. Name of the field in which the injection well is located;
 - E. County in the which the injection well is located;
 - F. Latitude and Longitude (decimal degrees) of well head location;
 - G. Latitude and Longitude Datum, indicate "1" for North American Datum of 1983 or "2" for North American Datum of 1927;
 - H. Injection well total depth (feet);
 - I. Top injection depth (feet);
 - J. Formation/Zone name at top injection depth;
 - K. Bottom injection depth (feet);
 - L. Formation/Zone name at bottom injection depth;
 - M. Date injection started in the well (Day/Month/Year, xx/xx/xxxx);
 - N. Total injection volume in barrels by calendar year (to present day);
 - O. Attach well construction diagram including all perforations, annular material, and seals;
 - P. Attach a description of all sources of fluid injected;
 - Q. Attach all data maintained in compliance with California Code of Regulations, title 14, section 1724.10, subdivision (h).
 - R. Attach documentation associated with each mechanical integrity test undertaken to comply with California Code of Regulations, title 14, section 1724.10, subdivision (j).

All required work plans and technical information must be submitted in an electronic format compatible with the State's GeoTracker system following the requirements of California Code of Regulations, title 23, section 3893 (available at http://www.waterboards.ca.gov/ust/electronic_submittal/docs/text_regs.pdf). A unique case identifier (Global ID) is assigned for each well subject to this Order contained in Attachment B.

Based on the information submitted in the work plan and/or technical report, additional information or action may be required.

Additionally, please submit a hard copy to the attention of:

Ron Holcomb
Central Valley Water Board
1685 E Street
Fresno, CA 93706

All information is to be copied to the Division, to the attention of:

Steven R. Bohlen, State Oil and Gas Supervisor
Department of Conservation, DOGGR
801 K Street
Sacramento, CA 95814-3500

Submissions pursuant to this Order need to include the following statement signed by an authorized representative of Bennett Petroleum, Inc.:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The failure to furnish the required report, or the submission of a substantially incomplete report or false information, is a misdemeanor, and may result in additional enforcement actions, including issuance of an Administrative Civil Liability Complaint pursuant to California Water Code section 13268. Liability may be imposed pursuant to California Water Code section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Any person aggrieved by this Order of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320. The State Water Board must receive the petition by 5:00 p.m., within 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations, and instructions applicable to filing petitions, are at http://www.waterboards.ca.gov/public_notices/petitions/water_quality/index.shtml, or will be provided upon request.

Be advised that sections 13260 and 13264 of the California Water Code require any person who proposes to discharge waste that could affect waters of the state to submit a Report of Waste Discharge for any new discharge or change in the character, volume, or location of an existing discharge. Fluids produced by oil or gas extraction activities that can no longer be disposed of in the injection wells subject to this Order cannot be discharged to land or waters of the state prior to the issuance of Waste Discharge Requirements, and cannot be discharged to waters of the United States prior to the issuance of an National Pollutant Discharge Elimination System (NPDES) Permit. Failure to comply with these requirements may constitute a misdemeanor under Water Code section 13265 or a felony under Water Code section 13387, and may also subject Bennett Petroleum, Inc. to judicial or administrative civil liabilities.

Roger M. Uhl
Bennett Petroleum, Inc.

- 5 -

15 May 2015

Any questions regarding this matter should be directed to me at (559) 445-5116 or at Clay.Rodgers@waterboards.ca.gov.



Clay L. Rodgers
Assistant Executive Officer

Enclosure:

Attachment A - Water Quality Sampling, Analysis and Reporting

Attachment B -- GeoTracker Upload Instructions and Assigned Global Identification Number(s)

ATTACHMENT A
Water Quality Sampling, Analysis, and Reporting

Water Quality Sampling

All groundwater sampling is to be performed by a qualified person. A qualified person is any person with the knowledge and training in proper sampling methods, chain of custody, and quality assurance/quality control protocols. Any person conducting groundwater sampling, other than personnel from a certified laboratory, shall consult with the certified laboratory to ensure that the sampler understands and follows the proper sampling collection procedures and protocols. All procedures to sample groundwater supply wells shall be consistent with US EPA Science and Ecosystem Support Division Operating Procedure for Groundwater Sampling (March 2013) (available at <http://www.epa.gov/region4/sesd/fbgstp/Groundwater-Sampling.pdf>).

Water Quality Analysis

Groundwater samples collected from wells and injection zones shall be analyzed by a laboratory certified by the Environmental Laboratory Accreditation Program, using current applicable EPA-approved analytical methods. The methods of analysis and the detection limits used shall be appropriate for the expected concentrations. The analytical method having the lowest method detection limit (MDL) shall be selected from among those methods that would provide valid results in light of any matrix effects or interferences. Analyze samples for the following:

- A. Total dissolved solids.
- B. Metals listed in California Code of Regulations, title 22, section 66261.24, subdivision (a)(2)(A)
- C. Benzene, toluene, ethylbenzene, and xylenes
- D. Total petroleum hydrocarbons for crude oil
- E. Polynuclear aromatic hydrocarbons (including acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, and pyrene)
- F. Radionuclides listed under California Code of Regulations, title 22, Table 64442, which includes Gross Alpha particle activity (excluding radon and uranium), Uranium, Radium-226, and Radium-228.
- G. Methane
- H. Major and minor cations (including sodium, potassium, magnesium, and calcium)
- I. Major and minor anions (including nitrate, chloride, sulfate, alkalinity, and bromide)
- J. Trace elements (including lithium, strontium, boron, iron, and manganese)

Water Quality Reporting

Work plans, and technical reports and associated data shall be uploaded in an electronic format compatible with the State's GeoTracker system.

Technical Report that includes

- Site plan with the location(s) of the wells sampled
- Description of field sampling procedures
- Copies of analytical laboratory reports, including quality assurance/quality control procedures and analytical test methods.
- Waste management and disposal procedures
- Table(s) of analytical results organized by well number (including API number).
- A list and location map of all the water supply wells located within a one mile radius of the injection well(s)

All GeoTracker uploads should consist of a GeoReport, GeoMap(s), and an EDF of laboratory data, if applicable.

ATTACHMENT B
GeoTracker Upload Instructions and Assigned Global Identification Number(s)

Work plans, and technical reports and associated data shall be uploaded in an electronic format compatible with the State's GeoTracker system. To begin the process:

- Log in or create a password
- Claim your site(s) (i.e. global ID)
- Add field point name(s)
- Upload the following:
 - Work plan/Technical report and associated data (GeoReport)
 - *laboratory report (EDF)
 - *Site Maps (GeoMAP)

For more information, please contact the GeoTracker Help Desk at Geotracker@waterboards.ca.gov or (866) 480-1028.

Injection Well	Assigned Global ID number
02914276	T10000006844

*GeoTracker submittal may not be required for all document types.

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF KERN

I am a citizen of the United States and employed in the County of Kern, State of California and my business address is 1405 Commercial Way, Suite 130, Bakersfield, California 93309; I am over the age of eighteen and not a party to the within entitled action.

On **June 15, 2015**, I served the following document(s) described as: **DECLARATION OF ROGER M. UHL IN SUPPORT OF BENNETT PETROLEUM, INC.'S PETITION TO REVIEW CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS TO PETITIONER** on the interested parties to said action or through their attorneys of record, by placing a true copy thereof in a sealed envelope, addressed as shown below, by the following means:

X **By Electronic Filing Service** - Complying with California Code of Civil Procedure §1010.6, I caused each such document(s) to be electronically served on the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
E-Mail: waterqualitypetitions@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Ron Holcomb
E-Mail: Ronald.Holcomb@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Clay L. Rodgers
E-Mail: Clay.Rodgers@waterboards.ca.gov

X **By First Class Mail** - I caused each such envelope, with first class postage thereon fully prepaid, to be deposited in a recognized place of deposit of the U.S. Mail in Bakersfield, California, for collection to the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
P.O. Box 100
Sacramento, California 95812-0100

X **By Personal Service** - I caused each such envelope to be personally delivered by hand to the addressee(s) shown below:

Central Valley Regional Water
Quality Control Board
Attention: Ron Holcomb

Central Valley Regional Water
Quality Control Board
Attention: Clay L. Rodgers

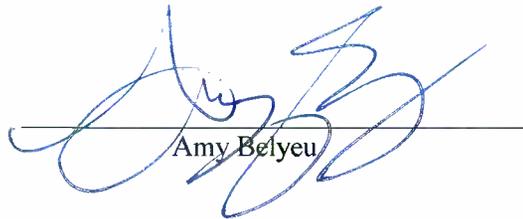
1685 "E" Street
Fresno, California 93706

1685 "E" Street
Fresno, California 93706

X **By Facsimile Transmission** - (Where permitted) I transmitted a true copy thereof (without Exhibits, where applicable, pursuant to *Instructions for Filing Water Quality Petitions*) by facsimile transmission from facsimile number (661) 631-2427, to the interested parties to said action at the fax number(s) shown below.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
Facsimile: (916) 341-5199

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am employed in the office of a member of the Bar of this Court at whose direction the service was made. Executed on **June 15, 2015**, at Bakersfield, California, County of Kern.



Amy Belyeu

1 Murray Tragish, Esq., CSB #80759
2 **LAW OFFICES OF MURRAY TRAGISH**
3 1405 Commercial Way, Suite 130
4 Bakersfield, California 93309
5 Tel: (661) 324-2648
6 Fax: (661) 324-2654

7 Ray T. Mullen, Esq., CSB #111852
8 **LAW OFFICE OF RAY T. MULLEN**
9 1405 Commercial Way, Suite 130
10 Bakersfield, California 93309
11 Tel: (661) 631-1531
12 Fax: (661) 631-2427

13 Attorneys for Petitioner: Bennett Petroleum, Inc.

14 STATE OF CALIFORNIA
15 STATE WATER RESOURCES CONTROL BOARD

16 In Re:

17 BENNETT PETROLEUM, INC.,
18
19 Petitioner

20 Case No.

21 DECLARATION OF GORDON M.
22 SCHLITZ IN SUPPORT OF BENNETT
23 PETROLEUM, INC.'S PETITION TO
24 REVIEW CENTRAL VALLEY REGIONAL
25 WATER QUALITY CONTROL BOARD'S
26 MAY 15, 2015 ORDER PURSUANT TO
27 CALIFORNIA WATER CODE SECTION
28 13267 AND TO RESCIND, CANCEL AND
WAIVE REQUIREMENTS OF SAID
ORDER AS TO PETITIONER

I, Gordon M. Schlitz, do hereby state and declare as follows:

1. I have personal knowledge of each of the matters stated herein, except where the text states otherwise, and if called as a witness could, and would, competently testify thereto.

2. This Declarant is a Petroleum Engineering Consultant and I have been engaged in consulting for the past 32 years. This Declarant has been engaged in consulting services pertaining to engineering for oil and gas well drilling, completion, work over, remedial and production operations to include product evaluation and planning, program and AFE preparation, material and contractor bid solicitation and evaluation and specific studies.

1 3. This Declarant also provides services pertaining to well site engineering and supervision
2 to include coordination of land matters, location preparation and clean up, conduct of operations,
3 costs control and report preparation.

4 4. In conjunction with the foregoing, I also provide petroleum engineering consulting
5 services for production engineering of light and heavy oil properties to include lease management,
6 production and water disposal facility design and construction, thermal operations, individual well
7 analysis, and artificial lift design and installations.

8 5. This Declarant has been involved in permitting, including project evaluation,
9 environmental assessments, application preparation and submittal, and liaison with government
10 agencies and representation at hearings.

11 6. Other services I have provided include project management, evaluation of oil and gas
12 properties, operator/agent to the State Division of Oil, Gas & Geothermal Resources (“DOGGR”),
13 preparation of DOGGR notices and reports, and non-operator representation.

14 7. I have attached as an Exhibit “A” to this Declaration a copy of my curriculum vitae,
15 which by this reference is incorporated as though set forth in full herein, which sets forth at greater
16 extent my qualifications and background.

17 8. This Declarant has read and reviewed the May 15, 2015 Central Valley Regional Water
18 Quality Control Water Board Order, Pursuant To California Water Code Section 13267 to the
19 Petitioner: Bennett Petroleum, Inc., a copy of which is attached to the Petition filed concurrently
20 herewith, and by this reference is incorporated as though set forth in full herein and through, and
21 shall hereinafter be referred to as the “Regional Water Order.”

22 9. The Regional Water Order directed to the Petitioner indicates that the DOGGR informed
23 the Central Valley Regional Water Quality Control Water Board (“Central Valley Water Board”)
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1 that an injection well (“Mott Well #1”) had been injecting fluids produced by oil or gas extraction
2 activities into an aquifer that may not have been properly designated as an exempt aquifer under the
3 Federal Safe Drinking Water Act.

4 10. The Regional Water Order requires Petitioner to provide extensive and complex
5 technical reports as further set forth in the Order, and contends that it has the authority to require the
6 reports pursuant to California Water Code Section 13267, which states in relevant part “*regional*
7 *board may require that any person who has discharged, discharges, or is suspected of having*
8 *discharged or discharging, or who proposes to discharge waste within its region... that could*
9 *affect the quality of waters within its region shall furnish, under penalty of perjury, technical or*
10 *monitoring program reports which the regional board requires. The burden, including costs, of*
11 *these reports shall bear a reasonable relationship to the need for the report and the benefits to*
12 *be obtained from the reports.*” (emphasis added)

13
14
15 11. The Regional Water Order asserts that the potential threat to human health and impacts
16 to water quality posed by discharge of waste associated with the injection of fluids into aquifers that
17 may be suitable for drinking water supply and beneficial uses is the basis for its requirements under
18 the Regional Water Order. (emphasis added)

19
20 12. This Declarant has reviewed DOGGR reports and records, including, but not limited to,
21 the April 1981 DOGGR Application for Primacy in the Regulation of Class II Injection Wells,
22 Under Section 1425 of the Safe Drinking Water Act (“1981 Primacy Application”), the DOGGR
23 Injection Reports for the Mott Well #1 from January 1977 through January of 2015 (copies of
24 which are attached as Exhibit “B” and Exhibit “C” and are incorporated by this reference as though
25 set forth in full herein and throughout), the 1973 California Oil & Gas Fields Report Number TR
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1 11, Volume 1, North and East Central California, and historical records with the DOGGR pertaining
2 to Mott Well #1.

3 13. The Mott Well #1 is located in Section 9, Township 31 South, Range 29 East, MDB&M
4 in the Main Area of the Mountain View Oil Field in Kern County. The Mott Well #1 was originally
5 drilled in 1946 by Pacific Western Oil Company to a total depth of 6,854 feet and completed as a
6 producing well in the basal Chanac and upper Santa Margarita Sands.
7

8 14. In 1974, Getty Oil Company was operator of the Well and proposed converting it to
9 water disposal which was approved by the DOGGR for injection in the Kern River-Chanac
10 formation. Mott Well #1 was converted to water disposal by setting a bridge plug at 5,240 feet in 5
11 ½” casing and perforating the intervals 4,518 to 4,555 feet and 5,035 to 5,125 feet for injection.
12 Additional Kern River-Chanac intervals from 3,992 feet to 4,773 feet (203 feet net) were perforated
13 for injection in 1977.
14

15 15. Texaco Producing, Inc. acquired Getty Oil Company in 1981 or 1982. The DOGGR
16 suspended the water disposal project in 1987, after the Mott Well #1 had been idle for more than
17 two years, and approval to inject into the well was rescinded. By September 1987 St. Regis
18 Resources Corporation had acquired the well, and sometime before 2000, Polaris Production, Inc.
19 had become the operator.
20

21 16. In January of 2000, the State Oil and Gas Supervisor declared the Mott Well #1 deserted
22 by Polaris and ordered its abandonment to be undertaken by the State in the event the operator of
23 record failed to perform.
24

25 17. As indicated in this Declaration, Petitioner acquired the Mott Well #1 in a three-way
26 agreement with the DOGGR and Polaris Production, Inc., pursuant to the DOGGR “Orphan Well
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1 Program” in September of 2003, thereby relieving the State Oil and Gas Supervisor of responsibility
2 for abandonment and groundwater sampling.

3 18. A review of the DOGGR monthly injection reports indicates that from May 1982
4 through August 1987 there was no water disposal engaged in at Mott Well #1, and that from
5 October 1987 through December 1988 there was little, if any, water disposal by the prior operators
6 of the Mott Well #1.

7
8 19. After twenty-four months of evaluating injection potential, Petitioner determined that
9 the Mott Well #1 was not suitable for disposal of produced water, and the Well was shut in. There
10 has been no injection into the Well since February of 2006. The Mott Well #1 is currently idle with
11 2 7/8” tubing landed in the 5 1/2” casing at 3,912 feet, with a 2 1/2” x 5 1/2” packer at 3,875 feet.

12
13 20. The previous total amount of barrels of produced water ten years ago by Petitioner is
14 approximately 7,636, after previous operators had disposed of over 200,000 barrels more than thirty
15 years ago.

16 21. The previous water disposals at Mott Well #1 was permitted and approved by DOGGR.

17
18 22. Based on typical Kern River/Chanac Formation sand, and assuming a very conservative
19 porosity of 25%, and a net injection interval of 332 feet, the theoretical distance from the Mott Well
20 #1 affected by the 7,636 barrels of injected fluid is less than a thirteen foot radius. A 1/4 mile area of
21 review as provided in 40 CFR Section 146.6, contains a unit pore (fluid) volume of 1,373 231³
22 feet/foot (3.1525 acre-feet in water terms). The 332 foot injection interval would contain a total
23 fluid volume of 455,912,692³ feet or 81,201,277 barrels (10,466 acre-feet.) Therefore the
24 Petitioners oil injection volume of 7,636 barrels is less than 1/100 of a percent of the formation fluid
25 in the quarter mile radius from the Mott Well #1.
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1 23. California Water Code section 13267, subsection b(1) states in part *“the burden,*
2 *including costs of these reports shall bear a reasonable relationship to the need for the report and*
3 *the benefits to be obtained from the reports....”* (emphasis added)

4 24. An unreasonable burden, including costs, is being placed on Petitioner for injecting
5 7,636 barrels of produced water into the Mott Well #1, after previous operators have disposed of
6 over 200,000 barrels 30 to 40 years ago. It is estimated that the costs to comply with the Order and
7 the highly detailed and complex technical reports will be between \$25,000 - \$30,000.

8 25. Any benefit to be obtained by the State from the requested highly complex technical
9 reports and information required by the Regional Water Order is minimal and far outweighs the
10 burden imposed on the Petitioner. The injection of 7,636 barrels of produced water into the aquifer
11 more than ten years ago would have miniscule effect, if any, on the water quality and certainly
12 would not be detectable today. The same applies to the 200,000 plus barrels by the previous
13 operators of the Mott Well #1 injection 30-40 years ago. Placing the burden for the technical
14 reports concerning Mott Well #1 on the Petitioner does not bear a reasonable relationship to the
15 need for the report and the benefits to be obtained from the reports.
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19 26. The previous operators and the Petitioner knowingly accepted the abandonment
20 responsibilities for Mott Well #1 in its acquisition agreement, but nowhere to be found in said
21 Agreement is there indication that the DOGGR reserved the right to renege on its approval of the
22 Well’s permit to be used for water disposal, and that burden would be paced on the Petitioner.
23

24 27. As it pertains to the Regional Water Order comments concerning the Mott Well #1 that
25 *“fluids produced by oil or gas extraction activities into an aquifer may not have been properly*
26 *designated as an exempt aquifer under the federal Safe Drinking Water Act”*, (emphasis added)
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1 **however, the Mott Well #1 is located in an exempt formation, and should not be subject to the**
2 **Regional Water Order.**

3 28. The 1981 DOGGR Application for Primacy in the Regulation of Class II Injection
4 Wells proposes the Kern River Formation in the Mountain View field as a “*Non-Hydrocarbon*
5 *Producing Zone Being Used For Water Disposal.*” (hereinafter referred to as the “1981 Application
6 for Primacy”), [see Appendix B, Table 1].
7

8 29. The 1973 Edition of California Oil and Gas Fields-Volume 1, North and East Central
9 California, Report TR111, has the Kern River Formation designated as the Kern River-Chanac
10 (Undifferentiated) Formation in the main area of the field. The 1975, and subsequent, DOGGR
11 annual reports includes the Kern River-Chanac as an active water disposal zone for the main area.
12 The reports list the Kern River as an inactive water disposal zone for the Arvin and West Arvin
13 areas. Also, the locally designated Nichols and Hood Sands of the Kern River-Chanac
14 (Undifferentiated) Formation are listed as producing zones for the Main Area of the Mountain
15 View field in the 1973 Edition. Attached as Exhibit “D” is a copy of the relevant sections of the
16 1973 California Oil and Gas Fields, Report TR111, Volume 1, North and East Central California,
17 which by this reference is incorporated as though set forth in full herein and throughout (hereinafter
18 referred to as the “California 1973 Oil & Gas Fields Report”). The DOGGR was remiss in
19 proposing the Kern River zone as an exempt non-hydrocarbon producing zone being used for waste
20 water disposal when there had been no injection into the zone for over eight years, but failing to
21 include the active Kern River-Chanac zone in the Appendix B, Table 1 of the 1981 Application for
22 Primacy to the EPA. Notwithstanding the foregoing, the Mott Well #1 injection interval clearly
23 falls within the depths of the Nichols and Hood Sands and should have been exempted as being
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1 located in a hydrocarbon producing zone as listed on the Main Area Data Sheet for the Mountain
2 View Field in California 1973 Oil and Gas Fields Report.

3 30. There is no benefit to be obtained from requiring complex and technical reports from
4 the Petitioner, and it appears that the only reason for the Regional Water Order is that the DOGGR
5 had reported to the Central Valley Regional Water Quality Board that the subject Well had been
6 injecting into an aquifer that may not have been properly designated an exempt aquifer, when it is
7 and should have been reported exempt.
8

9 31. Therefore, the information from the DOGGR was based on the Division's failure or
10 inadvertence to provide complete information to the EPA in its Application for Primacy, in that the
11 DOGGR did not include the Kern River-Chanac zone in Appendix B, Table 1 of the Application, as
12 it was obligated to do.
13

14 32. Therefore, it is respectfully submitted that the Regional Water Order burden does not
15 bear a reasonable relationship to the need for the reports and the benefits to be obtained from the
16 reports because of the fact that the Mott Well #1 has been shut in for over ten years, and that any
17 disposal was miniscule and lacked any impact into the surrounding area.
18

19 33. Further, that the technical information and reports should not be required by the Order as
20 to the Petitioner because they are not necessary to assess the potential threat to human health or
21 potential impacts to water quality, because all water disposal was in an exempt formation.
22

23 34. The requirement of the Regional Water Order does not bear a reasonable relationship to
24 the need for the report and the benefits to be obtained especially in view of the fact that the
25 formation in which the Mott Well #1 had disposed of water, was an exempt non-hydrocarbon
26 producing zone specifically for the allowance of said injection.
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I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct. Executed in Cambria, California on this 14th day of June, 2015


Gordon M. Schlitz

EXHIBIT A

PAGE _____ OF _____

Gordon Michael Schlitz
Petroleum Engineering Consultant
5050 Pineknolls Drive
Cambria, CA 93428
(661) 332-5974

SERVICES OFFERED

Engineering for oil and gas well drilling, completion, workover, remedial and production operations to include: project evaluation and planning; program and AFE preparation; material and contractor bid solicitation and evaluation; and special studies.

Wellsite engineering and supervision to include coordination of land matters, location preparation and cleanup, conduct of operations, cost control and report preparation.

Production engineering of light and heavy oil properties to include lease management; production and water disposal facility design and construction; thermal operations; individual well analysis; and artificial lift design and installation.

Permitting to include project evaluation, environmental assessments, application preparation and submittal, liaison with governmental agencies and representation at hearings.

Other services to include project management; evaluation of oil and gas properties, operator agent to the State Division of Oil, Gas & Geothermal Resources; preparation of DOGGR notices and reports; and non-operator representative.

EDUCATION: BSME, University of Southern California

EXPERIENCE

- 1984-Present Consultant specializing in engineering and management of drilling, completion, production and workover operations.
- 1980 - 1984 Tenneco Oil Company. Supervised 8-13 drilling engineers as Drilling Engineering Supervisor for West Coast Division. Coordinated well planning, permitting, engineering, reporting and scheduling of rigs and personnel for drilling and completion of 3-10 drilling rigs. Coordinated training of company engineers and supervised preparation of special studies and optimization reports.
- 1977 - 1980 Tenneco. Supervised oil and gas well drilling operations in California as drilling engineer, senior drilling engineer and project drilling engineer. Prepared plans, programs and cost estimates; performed office and on-site drilling engineering; and supervised all aspects of drilling and completion operations of wells ranging in depth from 1000' to 18,000'.
- 1970 - 1977 U. S. Marine Corps

EXPERIENCE (Con't)

- 1969 - 1970 Standard Oil Company of California. Evaluated drilling prospects and provided wellsite engineering and supervision of drilling operations at Railroad Gap, Asphalto and Elk Hills as senior drilling engineer.
- 1968 - 1969 Standard Oil. Supervised construction of drilling facilities on Alaska's North Slope as project engineer. Designed secondary recovery (water-flood) facilities for the Swanson River Field.
- 1966 - 1968 Standard Oil. Designed and supervised construction of surface lease facilities as production engineer. Supervised oil well drilling operations on company and contract rigs in the Midway Sunset and Buena Vista Field as drilling engineer.

MILITARY

- 1962 - 1966 U. S. Marine Corps. Served as infantry officer with duties as platoon commander, company executive officer, company commander, and assistant division operations officer; commanding officer of an officer training company and of a recruiting station; and operations officer of a training center. Currently commissioned as a major in the retired reserve.
- &
- 1970 - 1977

INDUSTRY COURSES

Well Control	LSU
Drilling Fluids Technology	Magcohar
Production Operations-Unit I	OGCI (Allen and Roberts)
Drilling Practices	P. Moore
Basic Economics	Tenneco
Solids Control	Stonewall Associates (Ormsby)
Modern Completion Practices	Halliburton
Human Resource Management	Tenneco
Advanced Well Drilling	Mitchell
Oil Mud Seminar	O'Brien-Goins
Blowout Prevention	Ventura College
Basic Formation Evaluation	Tenneco
Subsea Drilling Systems	Vetco
Advanced Economics	Tenneco/Stermole
Mud Motor School	Dyna Drill
Specialized Cementing	Tenneco

PROFESSIONAL ORGANIZATIONS: SPE and API

References and list of consulting clients furnished on request.

EXHIBIT B

PAGE _____ OF _____

Application for Primacy in the Regulation of Class II Injection Wells Under Section 1425 of the Safe Drinking Water Act

APRIL 1981



State of California
Resources Agency
Department of Conservation
Division of Oil and Gas



State of California

GOVERNOR'S OFFICE
SACRAMENTO 95814

EDMUND G. BROWN JR.
GOVERNOR

916/445-2843

April 20, 1981

Administrator
United States Environmental
Protection Agency
Washington, D. C. 20460

Dear Sir:

The State of California supported the passage in 1980 of H. R. 8117, which added Section 1425 to the Safe Drinking Water Act. This section deals with underground injection wells related to the recovery and production of oil and natural gas (EPA's Class II wells). This recent addition to the Act allows states with programs that effectively protect drinking water sources through the regulation of Class II injection wells to continue their programs in full compatibility with the Safe Drinking Water Act.

The California Department of Conservation, Division of Oil and Gas, has effectively supervised and regulated underground injection activities related to oil and natural gas production for the past 37 years. I therefore request approval of the Division's application for primacy in the supervision of Class II well operations under the Underground Injection Control Program, filed pursuant to Section 1425 of the Safe Drinking Water Act.

The California Department of Conservation's Division of Oil and Gas with the cooperation of the State Water Resources Control Board is willing and able to continue to carry out the program described in the Division's application for primacy.

Sincerely,


EDMUND G. BROWN JR.
Governor

APPLICATION FOR PRIMACY IN THE
REGULATION OF CLASS II INJECTION WELLS
UNDER SECTION 1425 OF THE
SAFE DRINKING WATER ACT

The preparation of this application was financed, in part, through an Underground Injection Control Program grant from the U. S. Environmental Protection Agency, Region IX, under the provisions of Section 1442(b)(3)(c) of the Safe Drinking Water Act as amended. The grant was administered by the California State Water Resources Control Board through Interagency Agreement No. 0-099-420-0 with the California Department of Conservation, Division of Oil and Gas.



State of California
Department of Justice
George Beukmejian
(PRONOUNCED DUKE-MAY-GIN)

3580 WILSHIRE BLVD.
LOS ANGELES 90010
(213) 736-2125

Attorney General

April 1, 1981

Administrator
United States Environmental
Protection Agency
Washington, D.C. 20460

Re: Legal Authority of California
Division of Oil and Gas to
Carry Out Class II Injection
Well Program

Gentlemen:

I am a Deputy Attorney General for the State of California whose responsibilities include advising and representing the California Division of Oil and Gas in legal matters. By virtue of these responsibilities I am familiar with Division 3 of the California Public Resources Code, which contains the statutory authority for all of the Division's functions. I am familiar also with Chapter 4 of Division 2 of Title 14 of the California Administrative Code, which contains the regulations adopted by the Division in furtherance of its functions set forth in the Public Resources Code.

I have reviewed the program description being submitted by the California Division of Oil and Gas as part of its application under section 1425 of the Safe Drinking Water Act for primary enforcement responsibility for the control of underground injection related to the production of oil and gas (Class II well injection program). I have concluded that the California Division of Oil and Gas has the legal authority to carry out all aspects of the program described in its application.

Very truly yours,

ALAN V. HAGER
Deputy Attorney General

AVH:mjp

MEMORANDUM OF AGREEMENT
BETWEEN THE ENVIRONMENTAL PROTECTION AGENCY AND
THE CALIFORNIA DIVISION OF OIL AND GAS

UIC PROGRAM
SECTION 1425 - SDWA

The California Division of Oil and Gas (CDOG) of the Department of Conservation and the Environmental Protection Agency (EPA) hereby agree to carry out the terms of the Underground Injection Control Program as listed below. These terms provide a commitment that the CDOG will carry out the program as authorized by Section 1425 of the Safe Drinking Water Act and the EPA will exercise its oversight authority consistent with procedures agreed upon by both agencies.

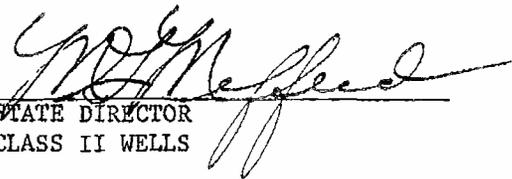
The terms are as follows:

1. The Division of Oil and Gas will carry out the program as described in the application for primacy of Class II wells, and will support the program by an appropriate level of staff and resources to assure that underground sources of drinking water are protected.
2. The Division of Oil and Gas will recognize the Environmental Protection Agency's right to examine any pertinent state files pertaining to underground injection control.
3. The Division of Oil and Gas will participate with the EPA in the inspection of wells or operator records to the fullest extent possible. EPA shall notify the division at least ten days prior to any proposed inspection and EPA shall describe the well(s) or record(s) to be inspected and the purpose of such inspection.
4. The Division of Oil and Gas recognizes EPA's authority to take federal enforcement action under Section 1423 of the Safe Drinking Water Act in cases where the state fails to take adequate enforcement action against a person violating the applicable requirements of the Underground Injection Control Program.
5. The Division of Oil and Gas agrees to provide the EPA an annual report on the operation of the state program, the content of which may be negotiated between the EPA and the Division of Oil and Gas from time to time.
6. Aquifer exemptions for Class II wells will be consistent with aquifer exemptions for the rest of the UIC program.
7. If appropriate and necessary, provisions for implementing a joint processing procedure may be negotiated between the EPA and CDOG for those facilities and activities which require permits from both agencies under different programs.

Memorandum of Agreement Between the
Environmental Protection Agency and
California Division of Oil and Gas
Page 2

8. For any mechanical integrity tests, other than those specified or justified in the program application, the CDOG will notify the appropriate regional administrator and provide enough information about the proposed test that a judgment about its usefulness and reliability may be made.

REGIONAL ADMINISTRATOR
ENVIRONMENTAL PROTECTION AGENCY
REGION IX



STATE DIRECTOR
CLASS II WELLS

Date

CALIFORNIA DIVISION OF OIL AND GAS PROGRAM DESCRIPTION

<u>PAGE</u>	<u>SECTION</u>
1	A. STRUCTURE, COVERAGE, AND SCOPE OF THE STATE PROGRAM
3	B. DESCRIPTION OF THE STATE PERMITTING PROCESS
7	C. COMPLIANCE SCHEDULES
9	D. TRANSFER OF PERMITS
10	E. TERMINATION OF PERMITS
10	F. EMERGENCY PERMITS
11	G. VARIANCES AND DISCRETIONARY EXEMPTIONS
12	H. DESCRIPTION OF RULES USED BY THE STATE TO REGULATE CLASS II WELLS
12	I. TECHNICAL REQUIREMENTS APPLIED TO OPERATORS BY THE STATE PROGRAM
15	J. AREA OF REVIEW
16	K. MONITORING, INSPECTION, AND REPORTING
21	L. ENFORCEMENT PROGRAM
22	M. AQUIFER EXEMPTION PROCESS
23	N. STAFFING AND RESOURCES
25	O. OTHER AGENCY INVOLVEMENT
25	P. INVENTORY OF CLASS II WELLS
25	Q. REVIEW OF EXISTING CLASS II WELLS
26	R. PUBLIC PARTICIPATION
26	S. COMPLAINT RESPONSE PROCEDURES
27	T. PAST PRACTICES
	APPENDIX A - COMPLIANCE DATA
	APPENDIX B - EXEMPTED AQUIFERS
	APPENDIX C - STATE FORMS
	APPENDIX D - STATUTES AND REGULATIONS

Division of Oil & Gas
UIC Program Submittal
Under Section 1425
of the SDWA

3.3. CALIFORNIA CLASS II INJECTION WELL PROGRAM

A. STRUCTURE, COVERAGE, AND SCOPE OF THE PROGRAM

The underground injection of fluids related to Class II injection wells is administered by the Division of Oil and Gas hereafter referred to as the (division) of the Department of Conservation. Section 3106 of the Public Resources Code (PRC) mandates, in part, the division to supervise the drilling, operation, maintenance, and abandonment of all wells (Section 3008, PRC) drilled in California for the purpose of injecting fluids for stimulating oil or gas recovery, repressuring of oil or gas reservoirs, or disposing of waste fluids from an oil or gas field. The division's authority to supervise also covers those Class II wells drilled and operated on federally owned lands.

Furthermore, Section 3106 (PRC) states that the division must supervise in a manner that will prevent, as far as possible, damage to life, health, property, and natural resources; damage to oil and gas reservoirs; loss of oil, gas, or reservoir energy; and damage to underground and surface waters that are suitable for irrigation or domestic purposes.

The division has prepared comprehensive regulations, contained in Title 14, Division 2, Chapter 4 of the California Administrative Code (CAC), that specifically pertain to the requirements that an applicant must comply with before the division will grant approval to begin a subsurface

injection project. References to statutory and regulatory authority of the division are contained within the text of the program description.

A copy of the regulations are attached. However, the procedures and information required by the regulations for project approval are summarized as follows:

The operator requesting approval for an underground injection project must provide to the appropriate division district deputy detailed data that, in the judgment of the division, are pertinent and necessary for the evaluation of a proposed project (Sections 1724.6 and 1724.7, CAC). In addition, the division requires by regulation that the operator submit as part of his application a detailed engineering study that includes a statement of the primary purpose of the project, the reservoir and fluid characteristics of each injection zone, evidence that abandoned wells within the area of review will not have an adverse effect on the project, casing diagrams and plugging information of all wells within the area of review, and the proposed well-drilling and abandonment program that is necessary to complete the project (Section 1724.7 (a), CAC).

Along with the engineering study, a geologic study and injection plan must also be submitted. At a minimum, the geologic study must include a structural and isopach map, a cross section, and a representative electric log that identifies all geologic units, formations, freshwater aquifers, and oil or gas zones (Section 1724.7(b), CAC).

An injection plan must include a map showing all wells within the area of review that penetrate the injection

interval, and schematics of surface and subsurface injection facilities; anticipated injection pressure and volumes; monitoring systems; method of injection; corrosion protective measures; and the source, analysis, and treatment of the injection fluid (Section 1724.7 (c), CAC).

Additional information can be requested for projects that may be hazardous, large, unusual, or particularly complex (Section 1724.7 (e), CAC).

In instances where an operator desires to change or modify any of the originally approved operating methods or conditions of a project, such as an increase in size, a change of the injection interval, or an increase of the injection pressure, the operator must obtain approval from the division (Section 1724.10 (a), CAC) before any change or modification is made. In addition to specific data required on division forms, sufficient information must be submitted by the operator upon request to properly evaluate the effects of the proposed change or modification (Section 1724.10(b) and (k), CAC).

B. DESCRIPTION OF THE STATE PERMITTING PROCESS

The operator of record is required to submit a complete project plan (as summarized in 3.3 A) to the division district office that has jurisdiction over the project area. Project plans must be signed by the owner or an officer or authorized agent of the company.

Before approving any project to inject fluids, wells within the area of review, including abandoned wells that

fuses to furnish any required report or record is guilty of a misdemeanor (Section 3236, PRC).

The misdemeanor is punishable by a fine of not less than one hundred dollars or more than five hundred dollars, or by imprisonment for not exceeding six months or by both fine and imprisonment (Section 3236, PRC).

The threat of severance or closure of any activity, including an associated production activity, that contributes to the degradation of fresh water is an effective incentive to an operator to correct the problem.

M. AQUIFER EXEMPTION PROCESS

After the division provides a public notice and the opportunity for public hearings, the division will identify and describe those aquifers or portions thereof which the division proposes to designate as an "exempt aquifer." To exempt an aquifer, the aquifer must meet the following criteria which is set forth in 40 CFR 146.04:

1. The aquifer does not currently serve as a source of drinking water; and
2. The aquifer cannot now and will not in the future serve as a source of drinking water because:
 - (a) It is mineral, hydrocarbon, or geothermal energy producing.
 - (b) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical.
 - (c) It is so contaminated that it would be economically

or technologically impractical to render that water fit for human consumption.

A list of the aquifers exempted by the above procedures is attached as part of the state submittal under Section 1425 of the SDWA.

Subsequent to program approval, identification of additional aquifers that qualify for exemption may be made by the division; however, any person who wishes to have an aquifer designated must submit to the division information including detailed maps and supportive data that would justify the proposed exemption. If there is sufficient evidence to indicate that an exemption may be justified, the division will provide notice and opportunity for a public hearing.

N. STATE STAFFING AND RESOURCES

In fiscal year 1981-82, a budget of \$5,328,136 and 133.3 authorized personnel years is proposed for the CDOG to conduct the Oil, Gas, and Geothermal Protection Program. This is an increase of 4 percent in funds and 2 percent in staff over the previous year. Well work is expected to increase about 5 percent (8,000 to 8,400) and the total number of wells to be regulated is expected to increase about 1 percent (78,400 to 79,500). Almost 90 percent of the total resources and staff (\$4,752,280 and 118.8 personnel years) are allocated for the regulation of oil and gas operations, approximately 11 percent of which (\$522,751 and 13.1 personnel years) will be expended for underground injection control associated with such operations. Regulation of oil and gas operations is carried out under the overall direction of the State Oil and Gas

APPENDIX B

Exempted Aquifers

Table 1

Pages B-1 to B-10 - Nonhydrocarbon-Producing Aquifers

Pages B-11 to B-45 - Maps Indicating Lateral Limits of
the Nonhydrocarbon-Producing Aquifers

Table 2

Pages B-46 to B-47 - Hydrocarbon Producing

Pursuant to 40 CFR 122.35(b), the Division of Oil and Gas provided notice and opportunity for a public hearing to consider comments regarding the exemption of certain aquifers from the provisions of the Safe Drinking Water Act. In addition to publication in a journal specializing in legal affairs, the notice was published twice in each of five different newspapers that have wide circulation in the oil- and gas-producing areas of California.

The proposed aquifer exemptions, or portions thereof, are either hydrocarbon-bearing or are currently being used for underground injection of oil- or gas-field waste water.

Except for the interest shown by two oil companies in knowing which aquifers were being designated for exemption, no other comments were received during the 15-day comment period. Because of the lack of comments, the holding of a public hearing was considered to be not warranted.

Pursuant to the criteria in 40 CFR 146.04 and the provisions of 40 CFR 122.35, the Division of Oil and Gas has identified those aquifers which are hydrocarbon producing. The hydrocarbon-producing aquifers are shown in Volumes I and II of "California Oil and Gas Fields", published by the California Division of Oil and Gas. The two volumes are included as part of this application for primacy.

The aquifers, or the portions thereof, are identified in each volume by shading the exempted aquifers on the maps and cross sections. The exempted portions are also described in terms of the average depth, thickness, and geologic age on the page opposite each map under the heading of "PRODUCING ZONES".

For the fields discovered after December 1973, maps and cross sections are not included as part of the application. However, a separate list (Table 2, pages B-46 to B-47) has been included to indicate the hydrocarbon-producing zones of these new fields that should be exempted.

Other aquifers (nonhydrocarbon producing) which are currently being used for injection of oil- or gas-field waste water are identified in Table 1, pages B-1 to B-10. Each aquifer is described in terms of depth, thickness, lateral extent, and geologic age. The lateral extent of the exempted aquifers normally coincide with the oil- or gas-field administrative boundaries designated by the Division of Oil and Gas, as shown on the accompanying maps.

For additional information concerning the aquifer exemption, see page 22 of the Program Description.

TABLE 1

Exempted Aquifers

Nonhydrocarbon Producing Zones Being Used for
Waste Water Disposal

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Belmont Offshore	Repetto (Pliocene) BP, R, S, T, Fo and F sands	Extends throughout the field	2,670-2,850	340-640	The S and T sands are productive in the Tar Zone of Wilmington field to the northwest.
Huntington Beach	Lakewood (Pleistocene) Alpha I & II	Confined to northeast portion of field by the Newport-Inglewood fault and Santa Ana River channel fill	70-100	100	These zones appear to out- crop underneath the ocean to the southwest.
Sawtelle	Puente (Miocene)	Extends throughout field	3,120	988	This is a highly faulted area.
Seal Beach	Repetto (Pliocene)	The only known lateral limit is the Seal Beach fault to the northeast	3,860	620	
	Recent sands	These sands cover an extensive area along the coast and inland to the Central Basin	40-60	10-40	These sands outcrop under- neath the sea, or are thinly covered by sedi- ments.
Wilmington, Paul Block II, III, IV, V	Wilmington channel gravels (Holocene) Gaspar aquifer	Extends between Ford Avenue and the Los Angeles River	80	100	This zone has been degraded by seawater infiltration and by perco- lation of oil field brines. The water is now used only for industrial purposes.

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

TABLE 1

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Ramona	Pico marine strata (Pliocene) basal sand	Extends throughout field	+ 153	200	Sand thickens to west
So. Tapo Canyon	Pico marine strata (Pliocene)	Covers southwest part of field	+ 829	70	
Oat Mountain	Undiff. marine strata (Miocene)	Covers Section 19 & Southwest 1/4 Section 20, T. 3N., R. 17W.	+1,143	2,200	
Simi	Sespe nonmarine strata (Oligocene)	Area north of C.D.L.B. Fault, Alamos Area	+ 347.	400	Part of injection interval may be in first oil zone.

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

TABLE 1

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Guadalupe	Knoxville (Cretaceous or older)	Extends throughout the field	-4,100	750	This formation is basement and is of regional extent.
Lompoc	Iospe (Miocene)	Extends throughout the field	-2,700	150	This formation is just above basement; might be of regional extent.
Russell Ranch	Knoxville (Cretaceous or older) Branch Canyon (Miocene)	Extends throughout the field Extends over the southern 2/3 of the field	-1,500 + 100	250 400	This formation is basement and is of regional extent.
San Ardo	Santa Margarita (Miocene)	Extends throughout the field	900	100	There appears to be a permeability barrier between north and south portions of field
Santa Maria Valley	Monterey (Miocene) "D" sand Monterey (Miocene) "E" sand Iospe-Franciscan (Miocene)- (Cretaceous or older)	Extends throughout the field Extends throughout the field T. 10N., R. 33W., S.B.BM, Sections 19, 20, 21, 28, 29, 30, 32 & 33	-1,200 -1,300 -1,800	30 100 800	These formations are basement and are of regional extent
Monroe Swell	Santa Margarita (Miocene)	Extends throughout the field	800	150	
Point Conception	Camino Cielo (Eocene)	Extends throughout the field	-4,500	450	Formerly Matillija
Guadalupe	Franciscan (Cretaceous or older)	Extends throughout the field	-5,700	1,000	This formation is basement and is of regional extent.

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Bellevue	Etchegoin (Pliocene)	Extends throughout the field	3,474	128-477	
Bellevue, West	Tulare-Etchegoin (Pleistocene) (Pliocene)	Both aquifers extend throughout the field	2,725 (Tulare) 4,370 (Etchegoin)	75 (Tulare) 138-550 (Etchegoin)	
Blackwells Corner	Tuney (Oligocene)	Extends throughout the field	1,473	40	Truncated by angular unconformity about 1/2 mile northwest of field.
Buena Vista	Tulare (Pleistocene)	Extends throughout the field	538	190-1,111	
Cal Canal	Tulare-San Joaquin (Pleistocene)	Extends throughout the field	1,505	693	Gradual thinning trend toward the southwest.
Canfield Ranch	Etchegoin (Pliocene)	Extends throughout the field	3,212	613-1530	
Coles Levee, North	Tulare (Pleistocene)	Extends throughout the field	1,470	434	
Coles Levee, South	San Joaquin (Pliocene) Etchegoin (Pliocene)	Extends throughout the field	2,688	187-743	
Greeley	Tulare-San Joaquin (Pleistocene) (Pliocene)	Both aquifers extend throughout the field	2,189	1,171	
Kern Bluff	Etchegoin (Pliocene)	Extends throughout the field	2,802	260-2,277	
	Kern River (Plio-Pleistocene)	Extends throughout the field	200	150	
	Vedder (Oligocene)	Extends throughout the field	4,607	166	

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

TABLE 1

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Kern Front	Santa Margarita (Miocene)	Extends throughout the field	2,548	650	
Kern River	Chanac (Miocene to Pleistocene)	Extends throughout the field	1,100	568	
	Santa Margarita (Miocene)	Extends throughout the field	1,698±	325-515	
	Vedder (Miocene)	Extends throughout the field	4,850	136-375	
Lakeside	San Joaquin (Pliocene)	Extends throughout the field	3,360	30	
Los Loblos	Tulare (proposed) (Pleistocene)	Extends throughout the field	1,950±	1,550±	
Midway-Sunset	Alluvium (Holocene)	Extends throughout the field	399	125-252	
Mount Poso	Walker (Eocene-Oligocene)	Covers northeast half of field	1,939 (top of Vedder)	656-661	Injected only in combination with the laterally interfingered Vedder, which extends throughout the field.
Mountain View	Kern River (Pliocene)	Extends throughout the field	2,680	1,320±	
Pleito	Chanac (Pleistocene)	Extends throughout the field	2,756	634	
	Kern River (Pliocene)	Extends throughout the field	3,272	384	

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

TABLE 1

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Poso Creek	Vedder (Oligocene)	Not penetrated in southwest portion of field but believed to extend throughout the field	3,640	95	
Rio Viejo	San Joaquin (proposed) (Pliocene)	Extends throughout the field	5,400	225	
Rosedale	Etchegoin (Pliocene)	Extends throughout the field	3,767	181	
Round Mountain	Olcese (Miocene)	Extends throughout the field	450	290-1050	Fault bounded 1 1/2 miles east of field limits, and pinches out 5 miles west of field limits,
	Walker (Eocene-Oligocene)	Extends throughout the field	2,300	270-702'	
Seventh Standard	Etchegoin (Pliocene)	Extends throughout the field	3,580	1,101-1,353	
Strand	Etchegoin (Pliocene)	Extends throughout the field	3,015	70-355	
	San Joaquin (Pliocene)	Extends throughout the field	3,090	732	
Ten Section	San Joaquin (Pliocene)	Extends throughout the field	2,298	397-1,027	

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Burrell	Santa Margarita (Miocene)	Extends throughout field	4,500	575	
	Tulare-Kern River Undiff nonmarine strata (Pliocene)	Extends throughout field	1,650	4,700	BFW \pm 1,000'
Southeast Burrell	Tulare-Kern River Undiff nonmarine strata (Pliocene)	Extends throughout field	1,800	4,700	BFW \pm 1,300'
Coalinga	Santa Margarita (Miocene)	Extends throughout all but west edge of field	Sur to 1,500	0-150	No Class I water in field
	Etchegoin-Jacalitos Undiff (Pliocene)	Extends throughout all but west edge of field	Sur to +500	0-1,500	
Gill Ranch Gas	Zilch (Miocene)	Extends throughout field	2,700	550	BFW \pm 500'
Gujarral Hills	Etchegoin-Jacalitos Undiff (Pliocene)	Extends throughout field	1,400	3,300	BFW \pm 1400' Top of injection zone 3,100'
Helm	Santa Margarita (Miocene)	Extends throughout field	4,600	400-700	
	Tulare-Kern River Undiff nonmarine strata (Pliocene)	Extends throughout field	1,800	\pm 3,000	BFW \pm 1,100'
Jacalitos	Etchegoin-Jacalitos Undiff (Pliocene)	Extends throughout field	<1,000	<3,000	BFW \pm 550' Top of injection zone \pm 1,700
Kettleman North Dome	San Joaquin-Etchegoin (Pliocene)	Etchegoin extends throughout field. San Joaquin is limited to the outer edges	1,000	6,500	No fresh water present

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

TABLE 1

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Raisin City	Undiff. nonmarine strata (Pliocene)	Extends throughout field	1,800+	2,200+	Base of fresh water is 900'. Injection is into various sands at various depths.
Riverdale	Santa Margarita (Miocene)	Extends throughout field	1,625	4,000	Base of fresh water is 1,300'. Injection into various sands at various depth.
San Joaquin	Undiff. nonmarine strata (Pliocene)	Extends throughout field	4,500	800	Base of fresh water is 900'. Injection is into various sands at various depths.
San Joaquin Northwest	Basal McClure (Miocene)	Extends throughout field	1,300	40	Base of fresh water is 900'. Well was used only for testing, then shut-in and later abandoned.
Turk Anticline	San Joaquin (Pliocene)	Extends throughout field	5,000	400	Base of fresh water is 2,500'. Injection into separate sands at various depths.

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

TABLE 1

Field	Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Bunker Gas	Undiff. nonmarine strata (post Eocene) lowermost sands	Extends throughout field	2,900-3,100	100	Base of fresh water approximately 2,350'.
Grimes Gas	Kione (Late Cretaceous) upper and middle sands	Extends throughout field	3,000-4,000	500	Kione is major producing formation in northern Sacramento Valley and con- tains gas in adjacent fields.
Grimes, West, Gas	Kione (Late Cretaceous) intermediate sand	Extends throughout field	3,300-3,800	600	Kione is major gas producing formation in northern Sacramento Valley and con- tains gas in adjacent field.
La Honda (South Area)	Vaqueros (Miocene) intermediate member	Covers southwestern portion of field	1,400-2,000	250	Portion of formation could be productive in field.
Lathrop Gas	Starkey (Lake Cretaceous) intermediate sand	Covers western quarter of field	4,000-4,500	100	Starkey is major gas pro- ducing formation in fields to the north.
River Break Gas	Capay (Eocene) Second Capay sand	Confined to middle por- tion of Section 24, T. 2N., R. 2E., M.D.B.&M.	4,900-5,000	150	
Roberts Island Gas	Undiff. nonmarine strata (post Eocene)	Extends throughout field	500-1,000	>500	Injection through surface string annuli with all shoes below 490'. No fresh water below 100'.
Sutler Buttes Gas	Kione (Late Cretaceous)	Confined to south- western portion of field	1,200-2,800	700	Kione is major gas producing formation in northern Sacramento Valley and con- tains gas in adjacent fields.

NON-HYDROCARBON PRODUCING ZONES BEING USED FOR WASTE WATER DISPOSAL

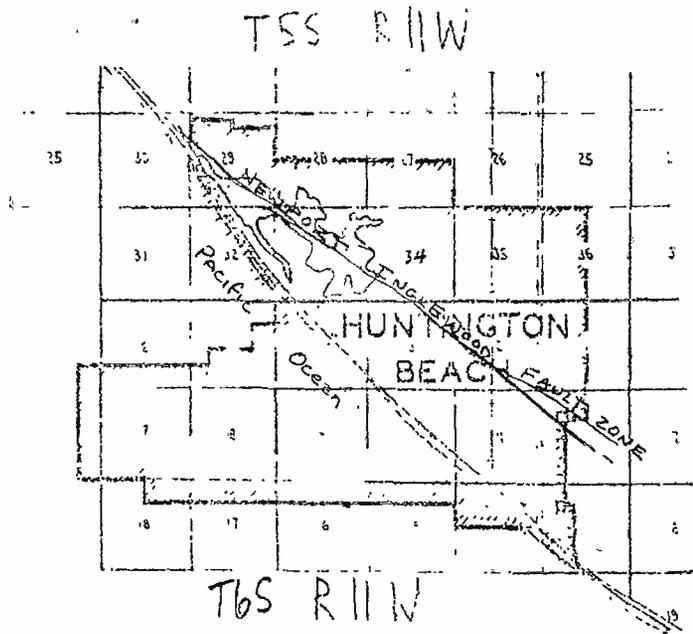
TABLE 1

Formation & Zone	Lateral Limits	Depth to Top (feet subsea)	Thickness (feet)	Remarks
Mokelumne River (Late Cretaceous) Third Massive zone Undiff marine and Ione (Eocene)	Confined to east side of Stockton Arch fault Extends throughout field	4,500-5,300 1,400-1,700	500 650	Third Massive is major producing zone to north and west. Domingine (Ione) is major gas producing field to south.

sheet 1

HUNTINGTON BEACH OIL FIELD - Dist 1

Orange County

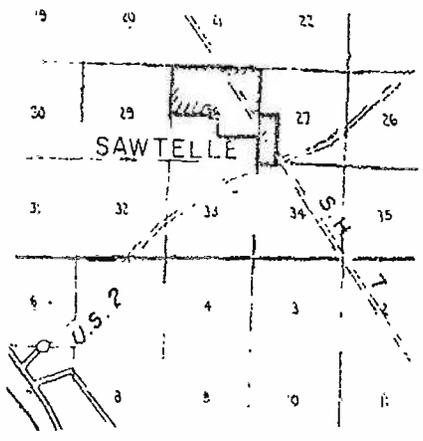


District 1

SAWTELLE OIL FIELD - Dist. 1

Los Angeles County

T1S R15W



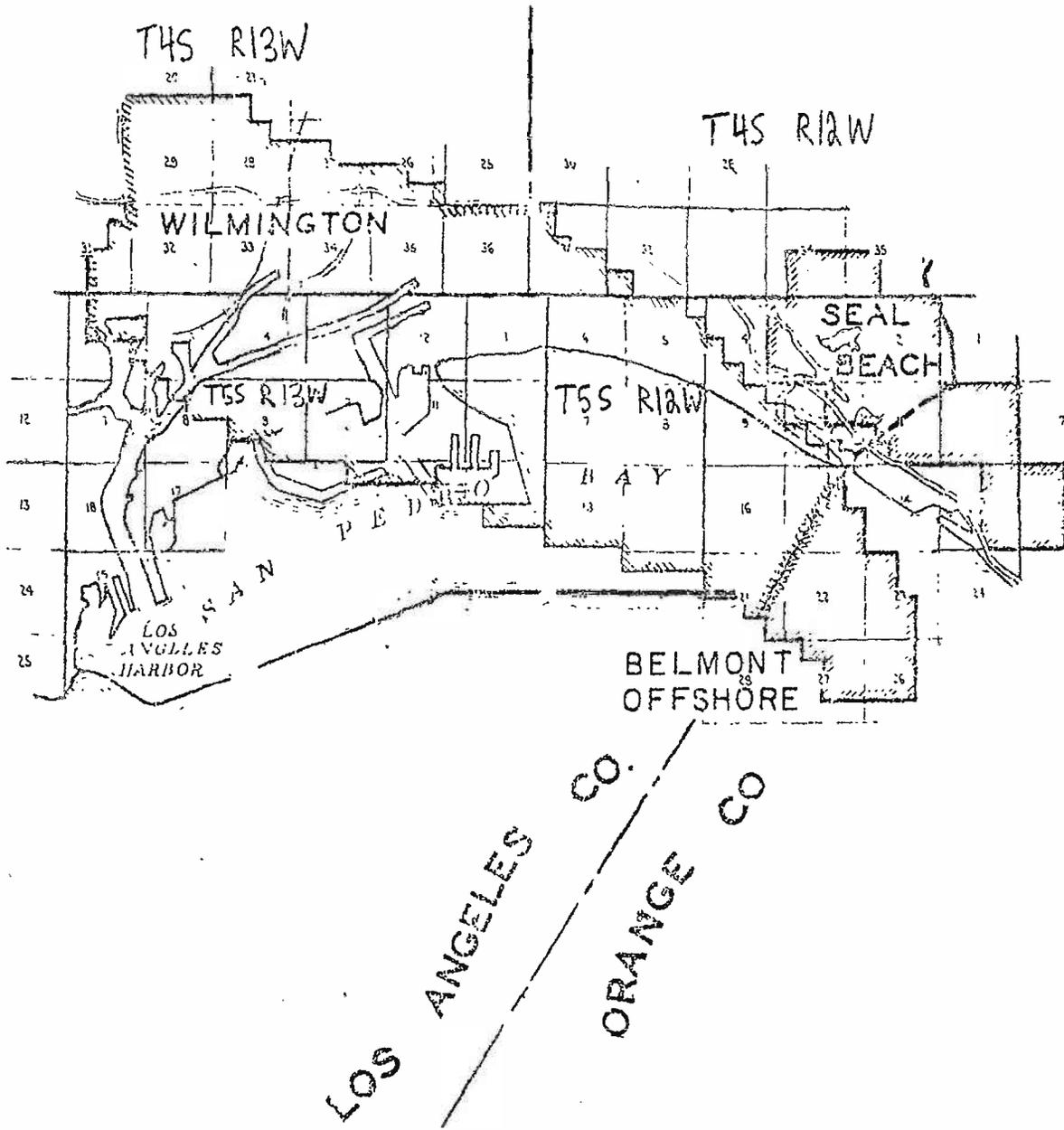
T2S R15W

District 1

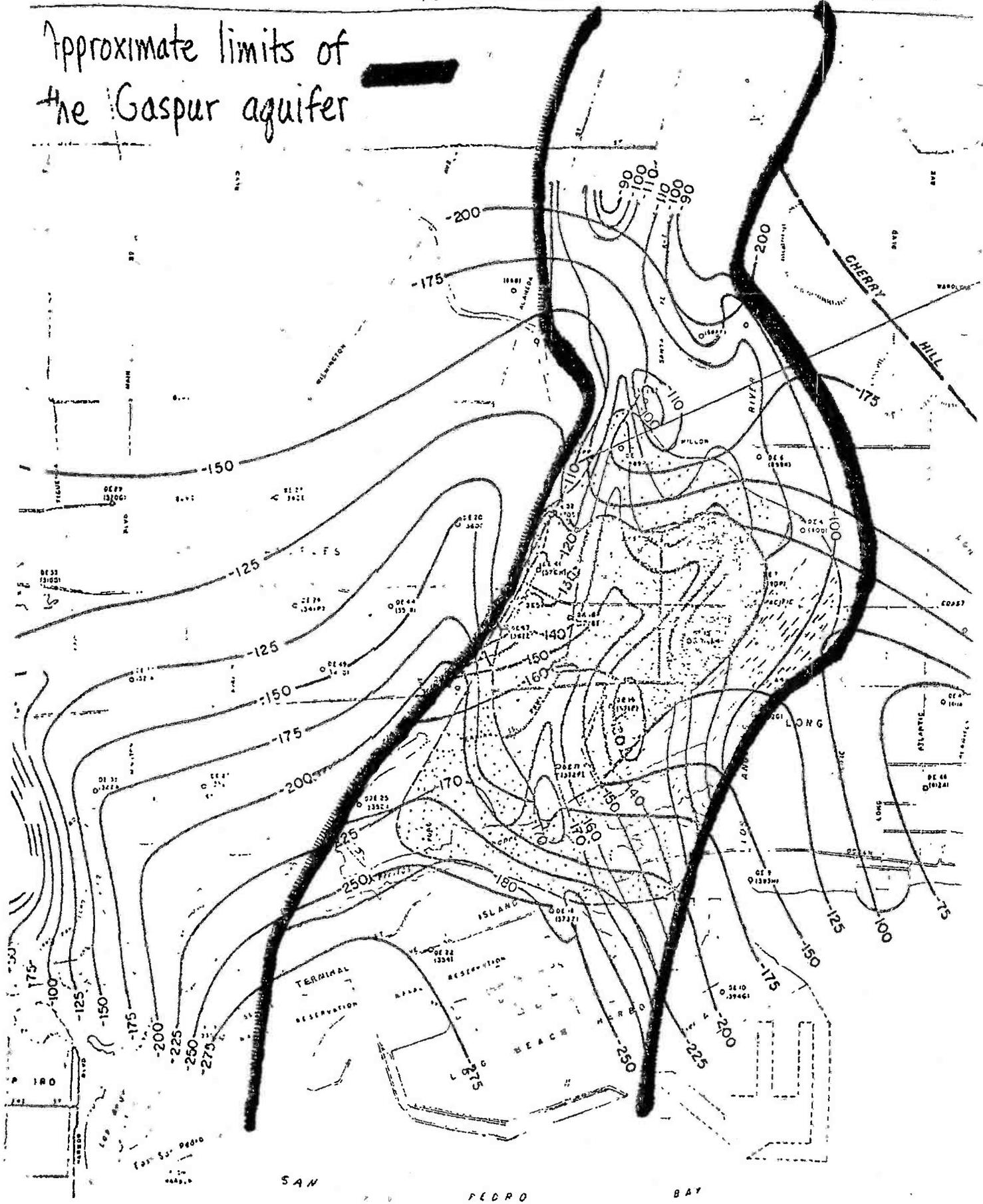
WILMINGTON, SEAL BEACH, and BELMONT OFFSHORE OIL FIELDS

Dist 1

Los Angeles and Orange Counties



Approximate limits of
the Gaspar aquifer



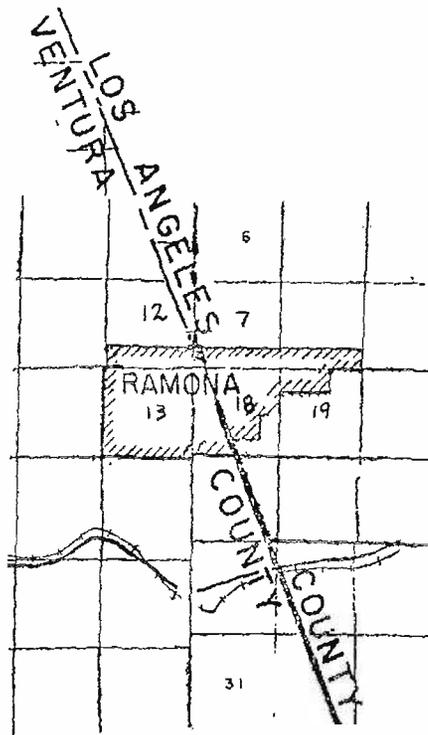
District 2

RAMONA OIL FIELD

Los Angeles and Ventura Counties

Dist 2

T4N R18W



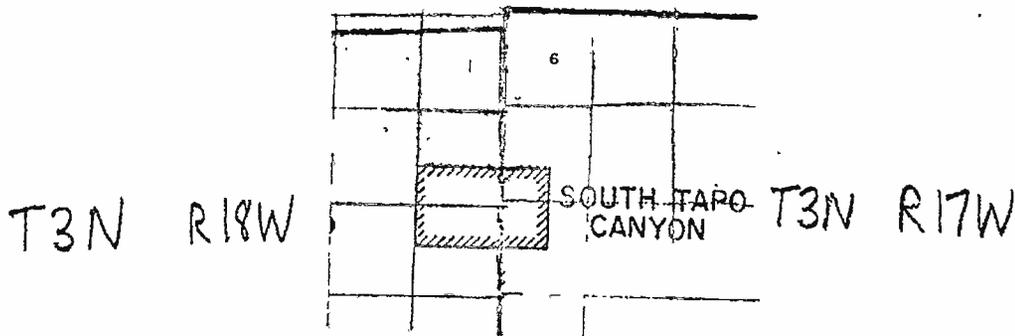
T4N R17W

District 2

SOUTH TAPO CANYON OIL FIELD

Dist 2

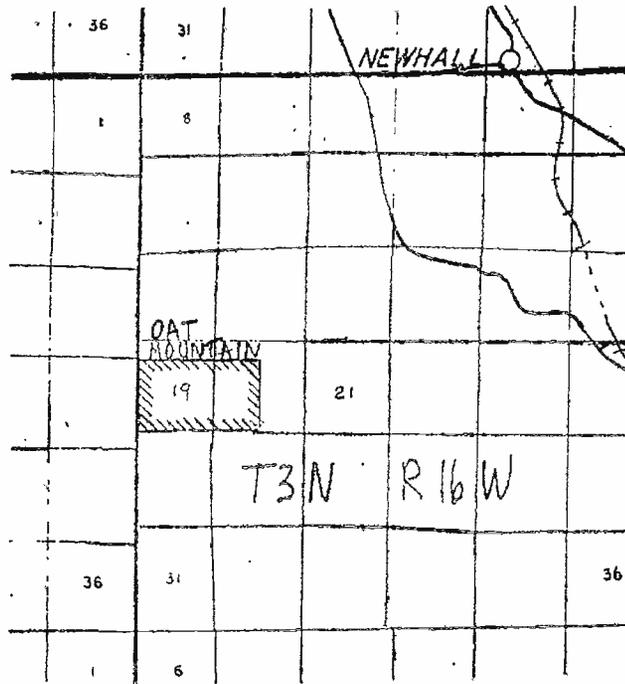
Ventura County



District 2

OAT MOUNTAIN OIL FIELD Ventura County

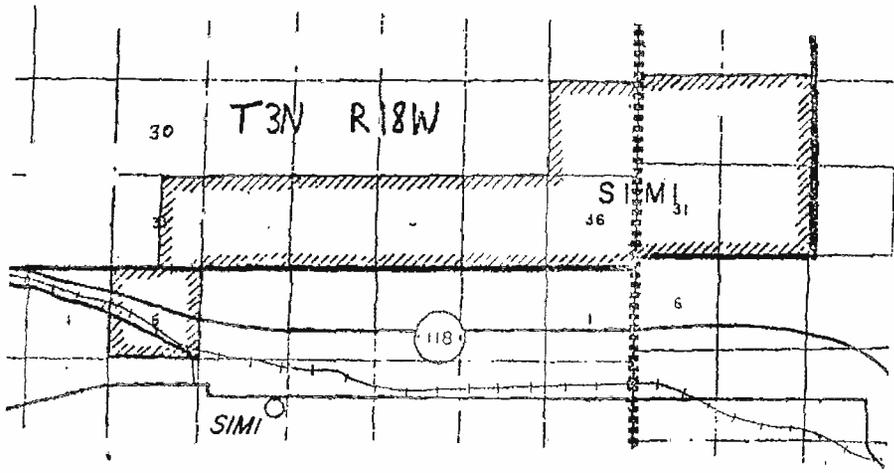
Dist. 2



District 2

SIMI OIL FIELD Ventura County

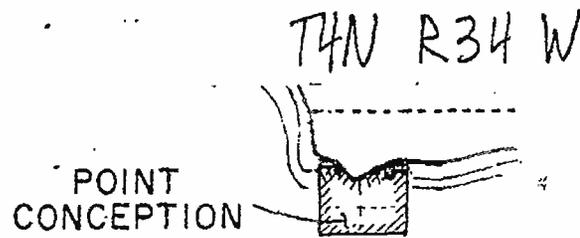
Dist 2



District 3

POINT CONCEPTION OIL FIELD
Santa Barbara County

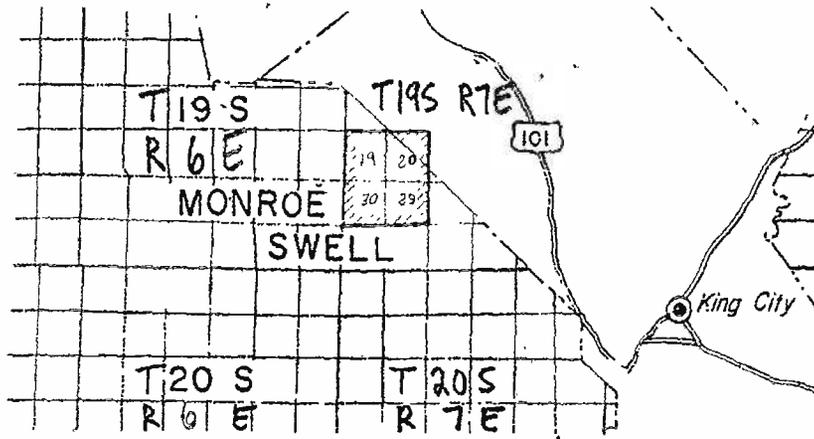
Dist. 3



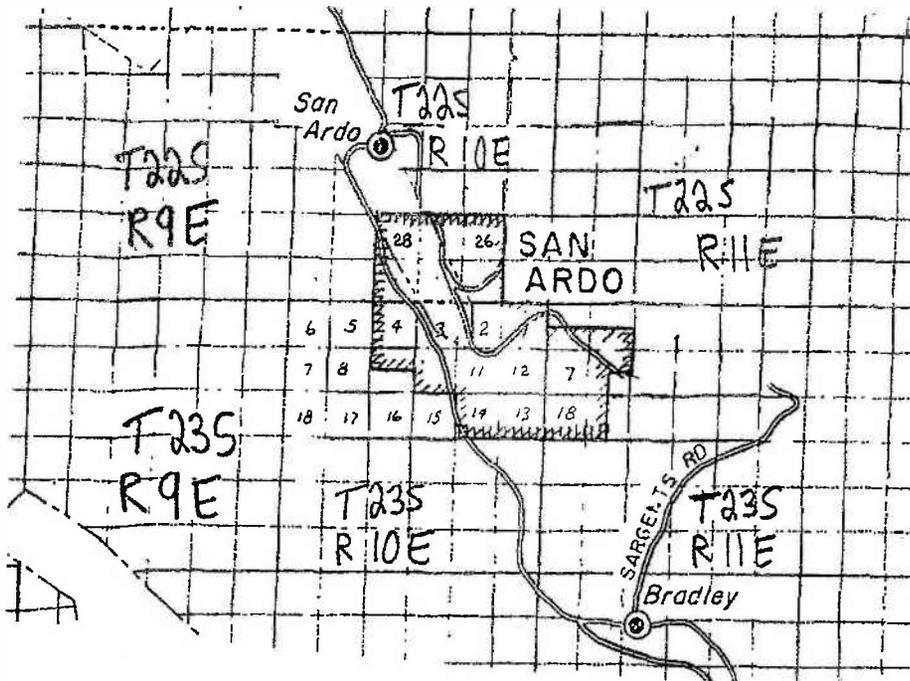
District 3

MONROE SWELL OIL FIELD Monterey County

Dist 3



SAN ARDO OIL FIELD Monterey County

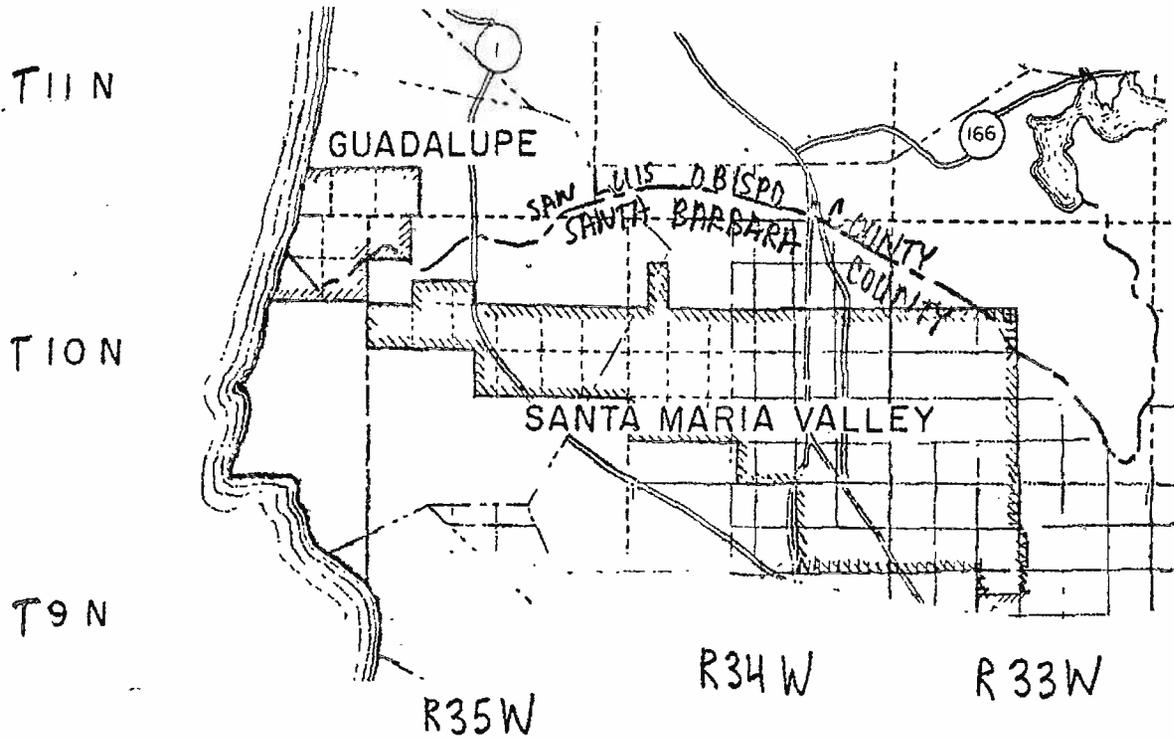


Tract 3

GUADALUPE and SANTA MARIA VALLEY OIL FIELDS

Dist 3

San Luis Obispo and Santa Barbara Counties

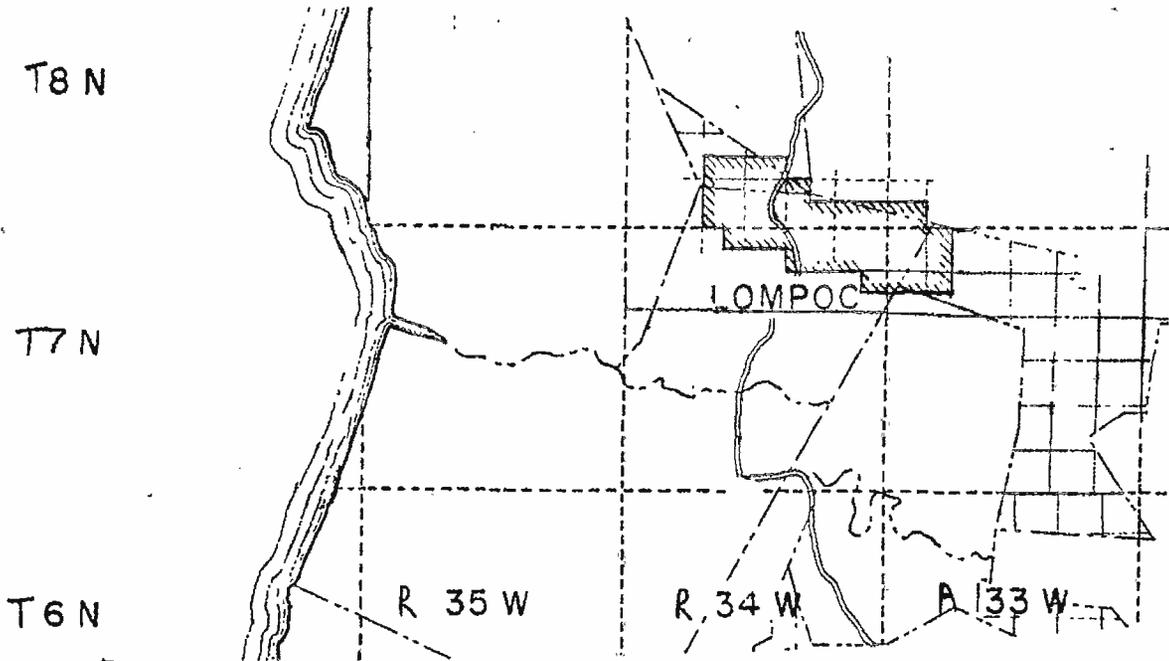


1 sheet 3

LOMPOC OIL FIELD

Santa Barbara County

Dist 3

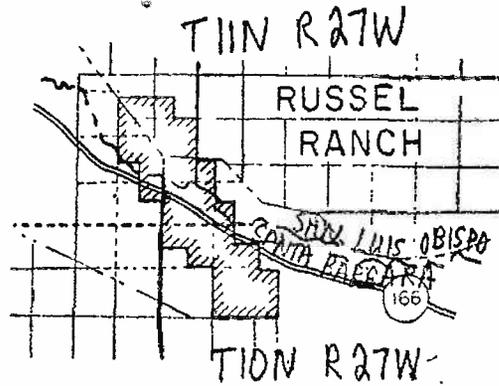


Dist 3

RUSSEL RANCH OIL FIELD

Dist 3

San Luis Obispo and Santa Barbara Counties

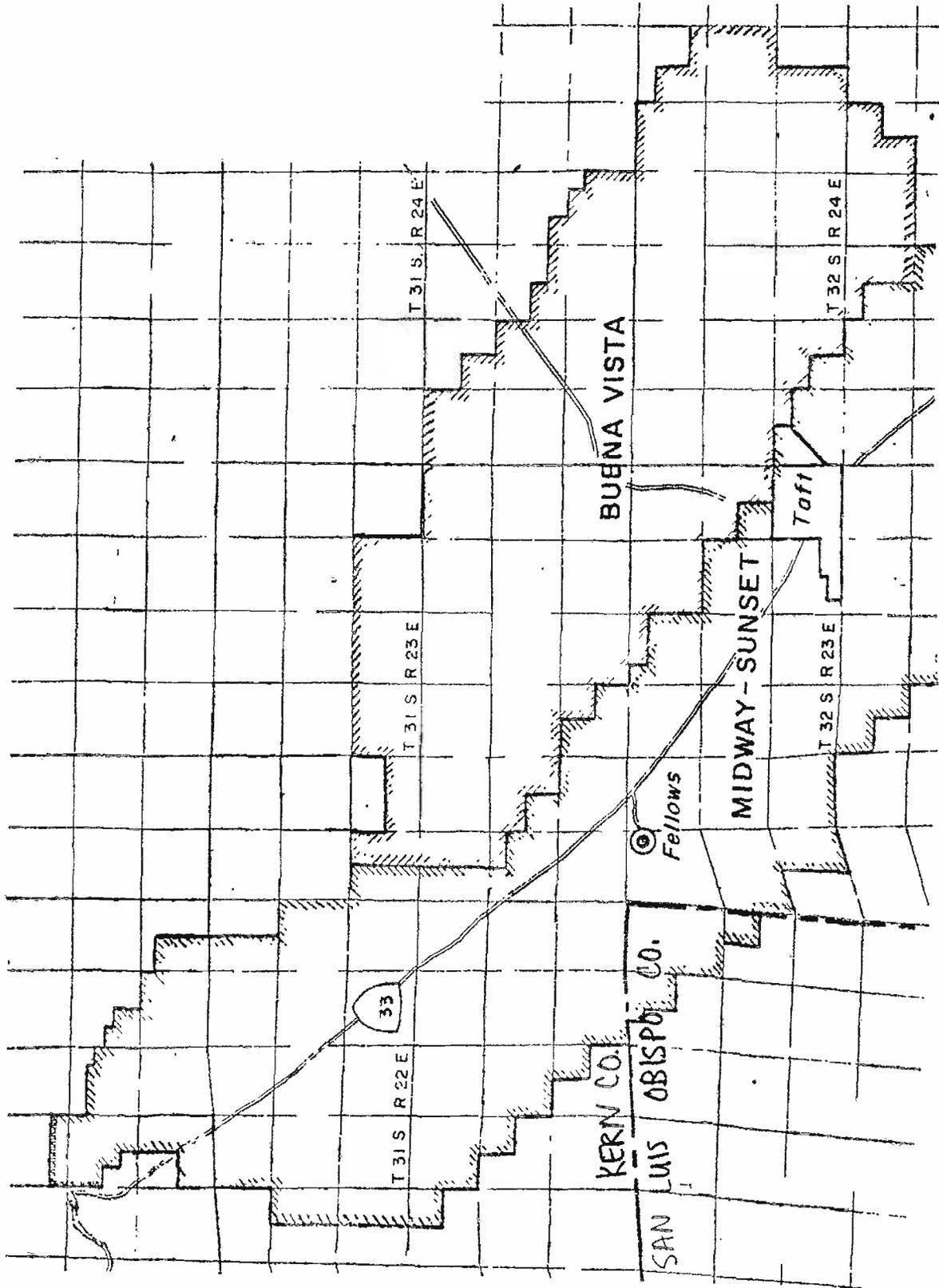


District 4

BUENA VISTA and north MIDWAY SUNSET OIL FIELDS

Dist 4

Kern and San Luis Obispo Counties

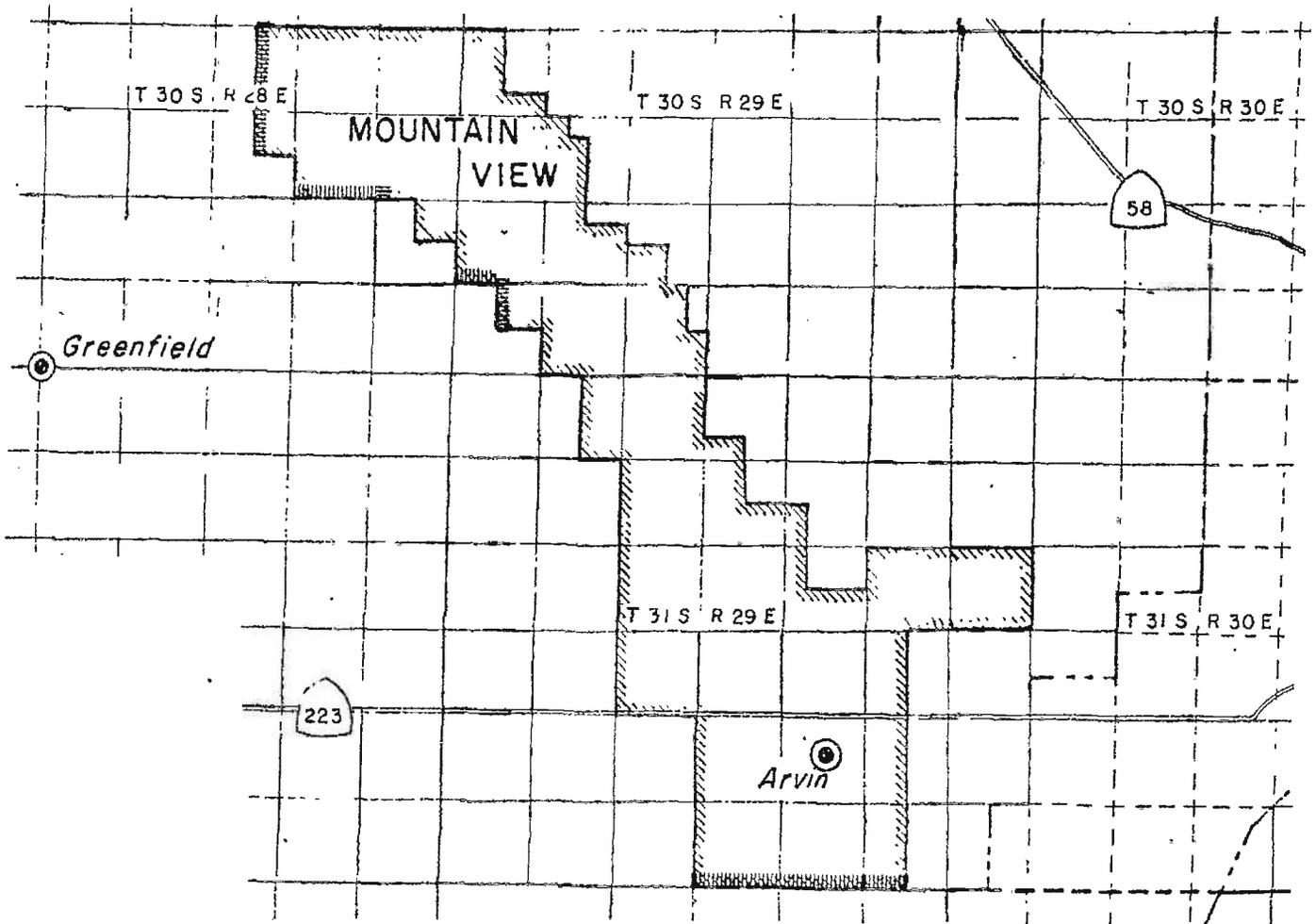


Sheet 4

MOUNTAIN VIEW OIL FIELD

Kern County

Dist 4

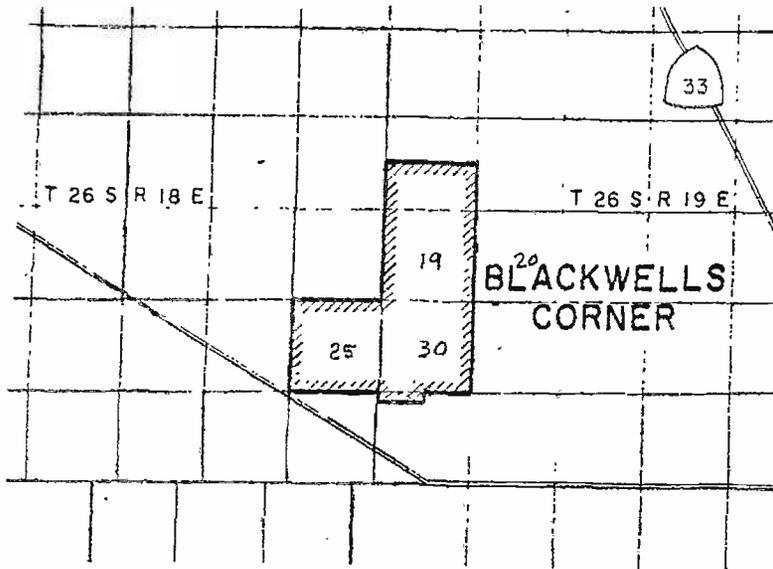


Tract 4

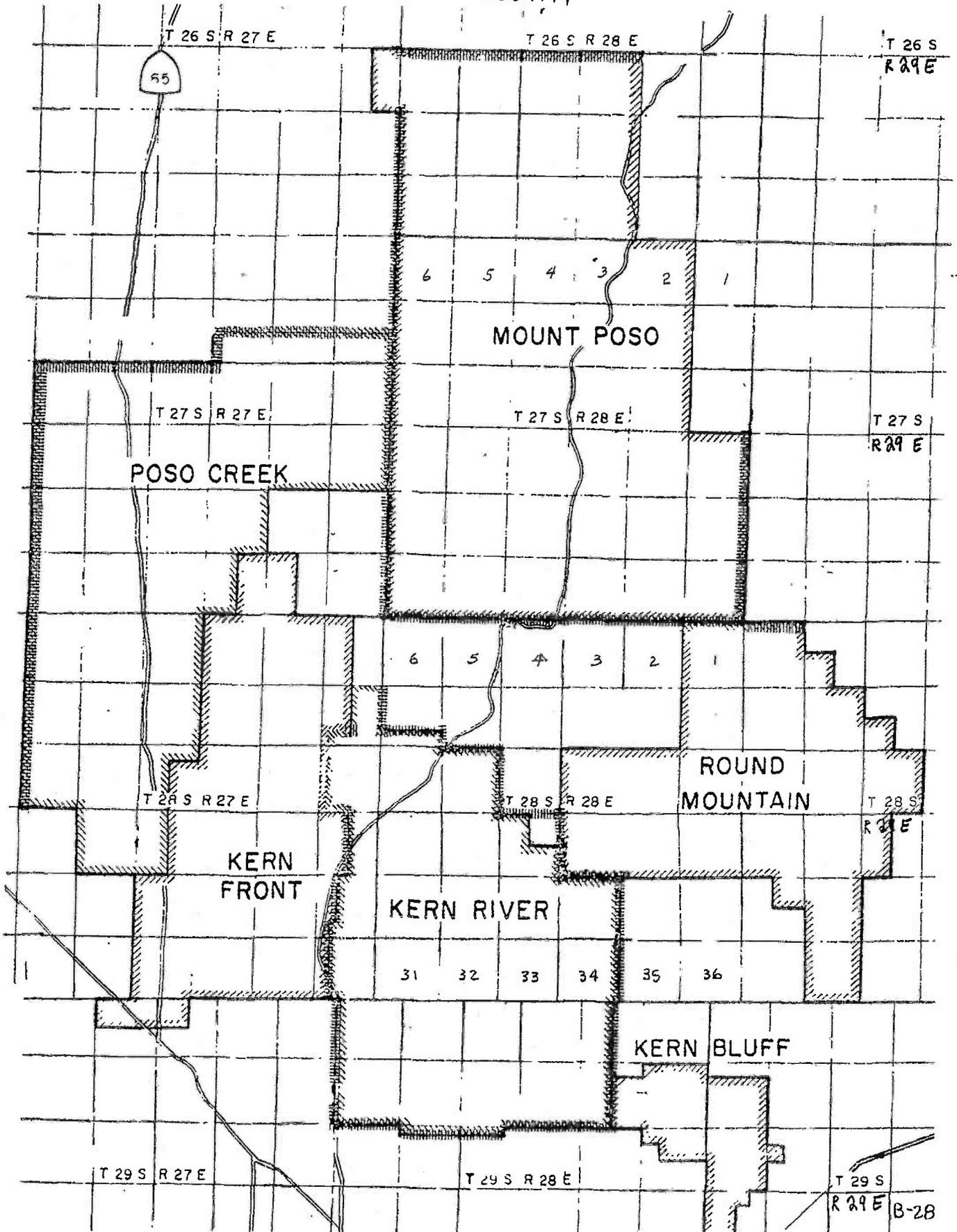
BLACKWELLS CORNER OIL FIELD

Dist 4

Kern County

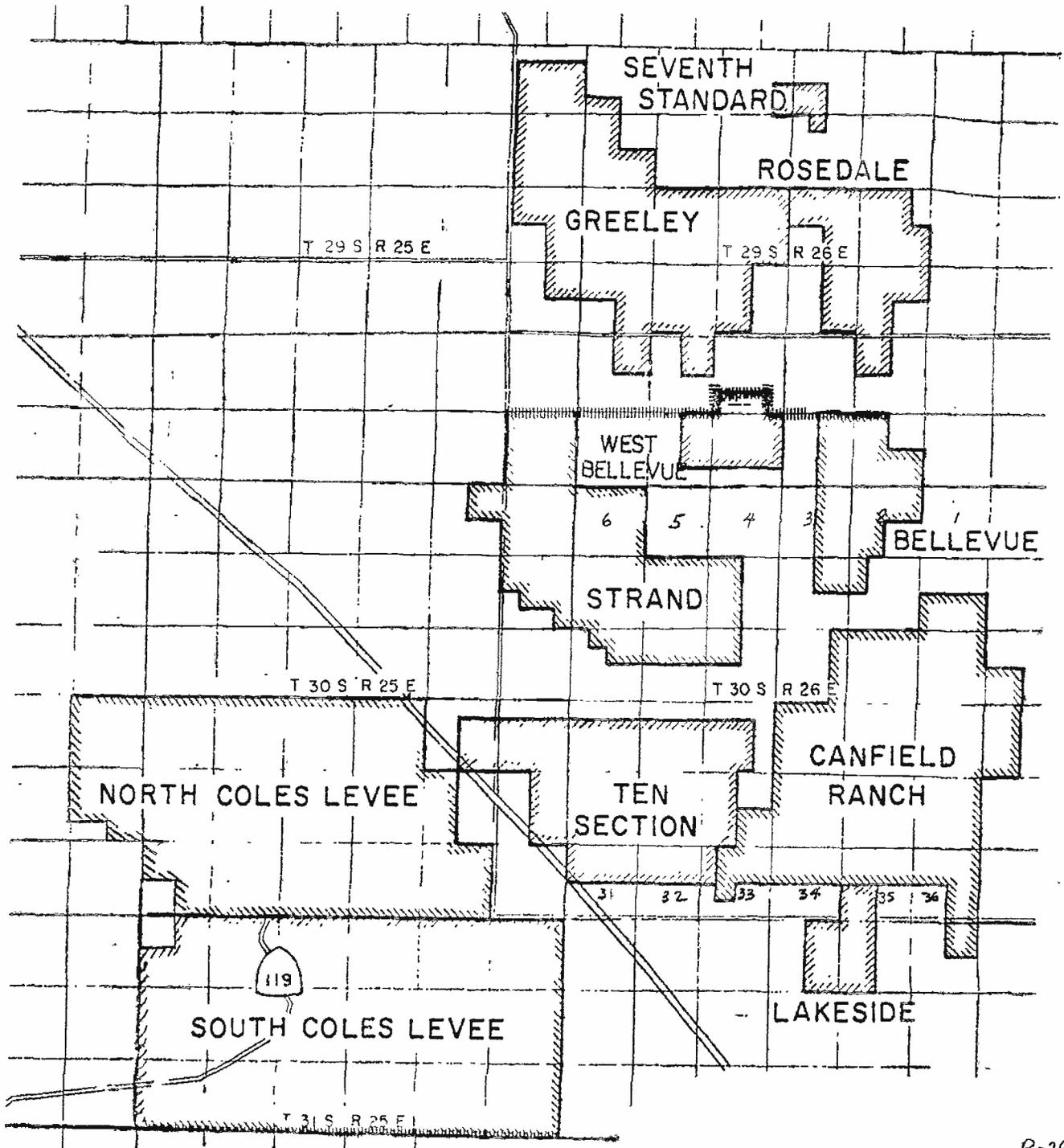


District 4 KERN BLUFF, KERN FRONT, KERN RIVER, MOUNT POSO,
POSO CREEK, and ROUND MOUNTAIN OIL FIELDS
Kern County Dist 4



Dist 4 BELLEVUE, WEST BELLEVUE, NORTH COLES LEVEE,
 SOUTH COLES LEVEE, CANFIELD RANCH, GREELEY,
 LAKESIDE, ROSEDALE, SEVENTH STANDARD, STRAND
 AND TEN SECTION OIL FIELDS
 Kern County

Dist 4

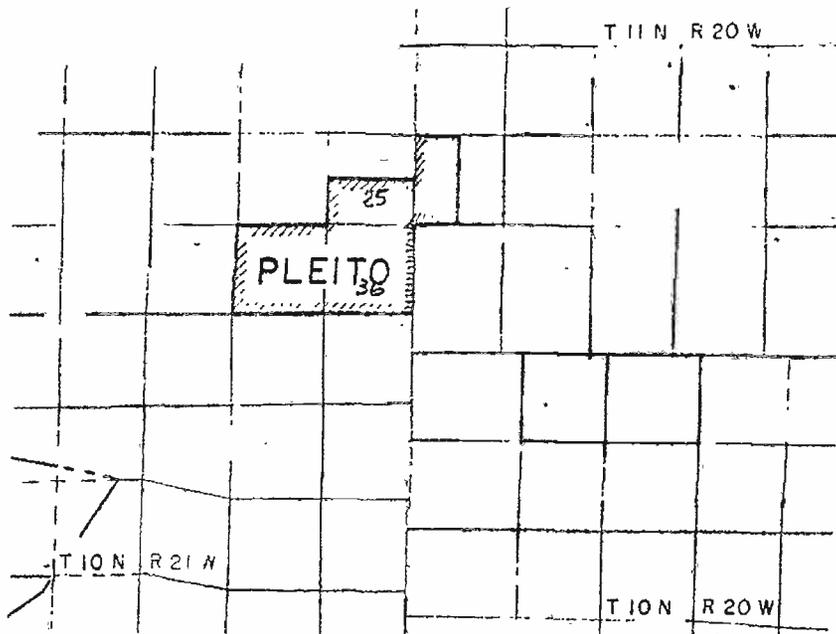


Sheet 4

PLEITO OIL FIELD

Dist. 4

Kern County

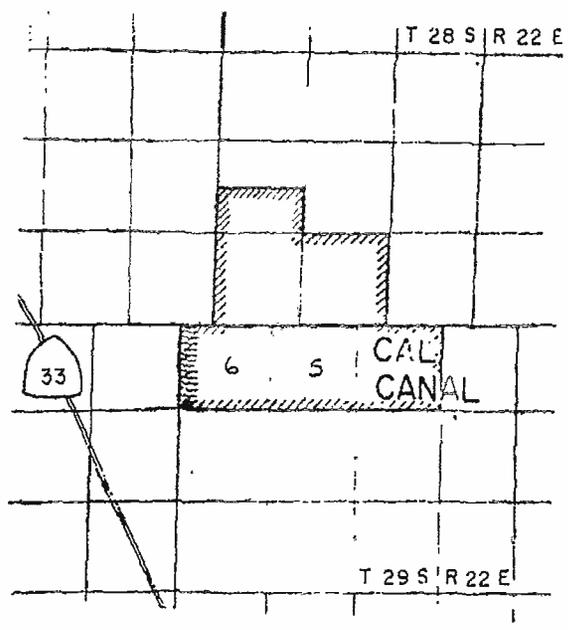


Dist 4

CAL CANAL OIL FIELD

Dist 4

Kern County



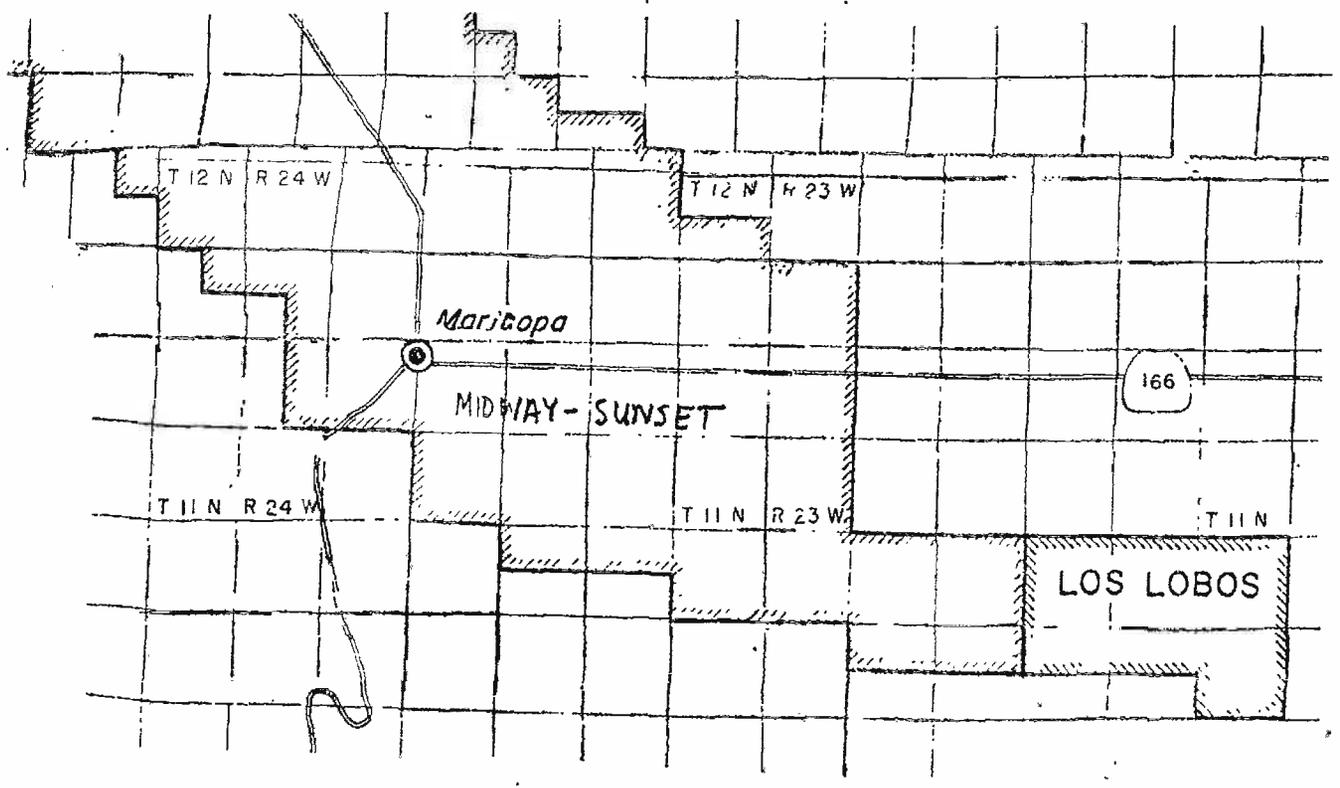
Sheet 4

South MIDWAY-SUNSET and LOS LOBOS

Dist 4

OIL FIELDS

Kern County

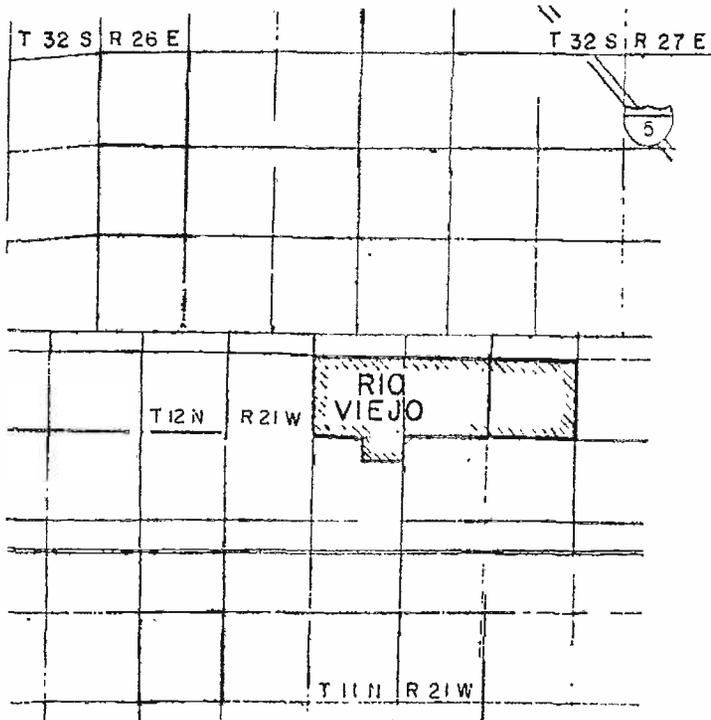


Dist 4

RIO VIEJO OIL FIELD

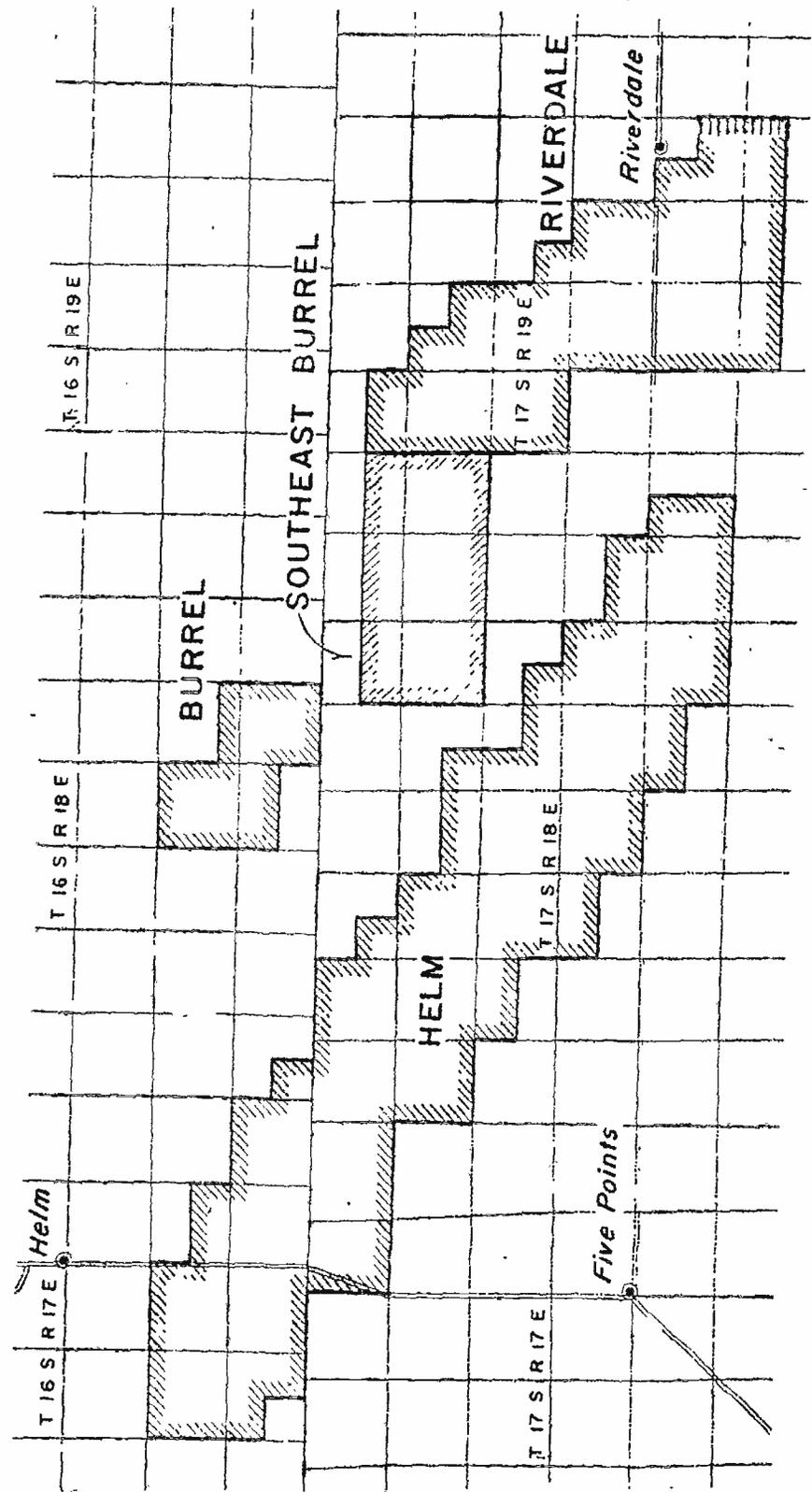
Dist 4

Kern County



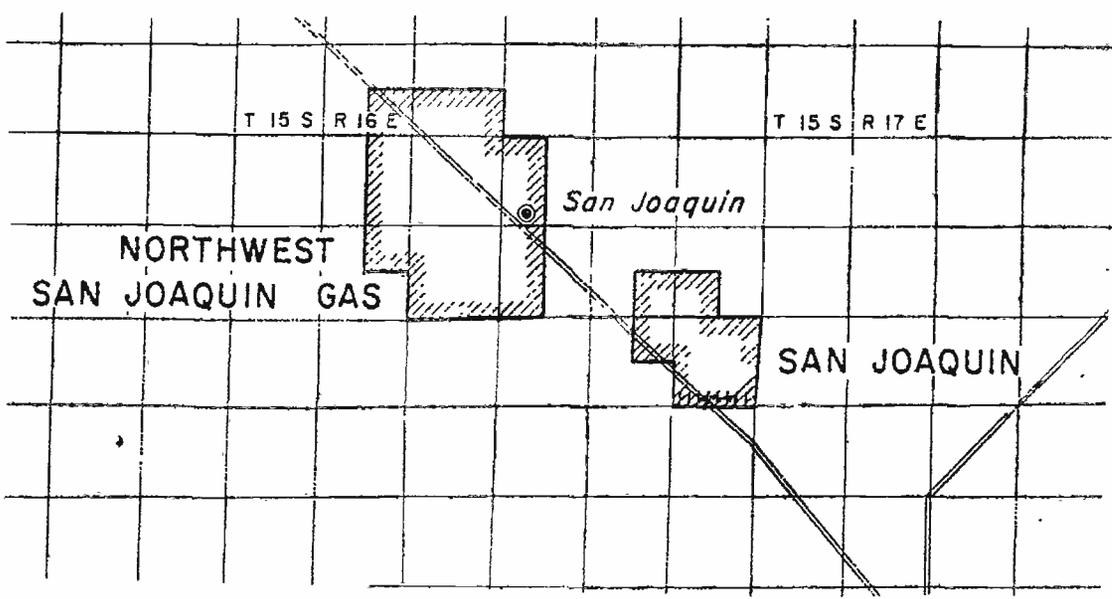
BURREL, SOUTH EAST BURREL, HELM, and RIVERDALE OIL FIELDS

Fresno County



District 5 SAN JOAQUIN OIL FIELD and NORTHWEST
SAN JOAQUIN GAS FIELD

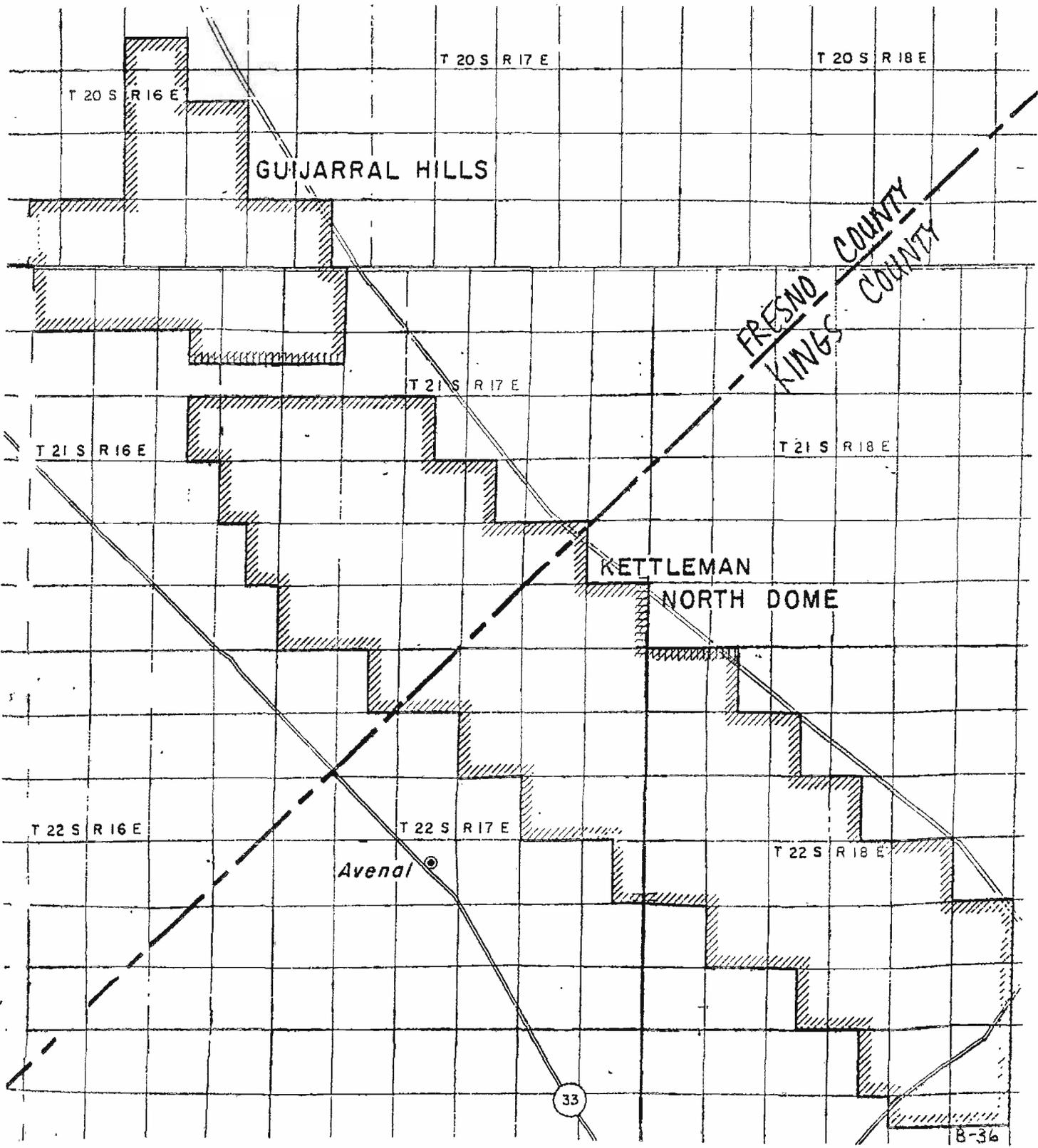
Fresno County



Sheet 5

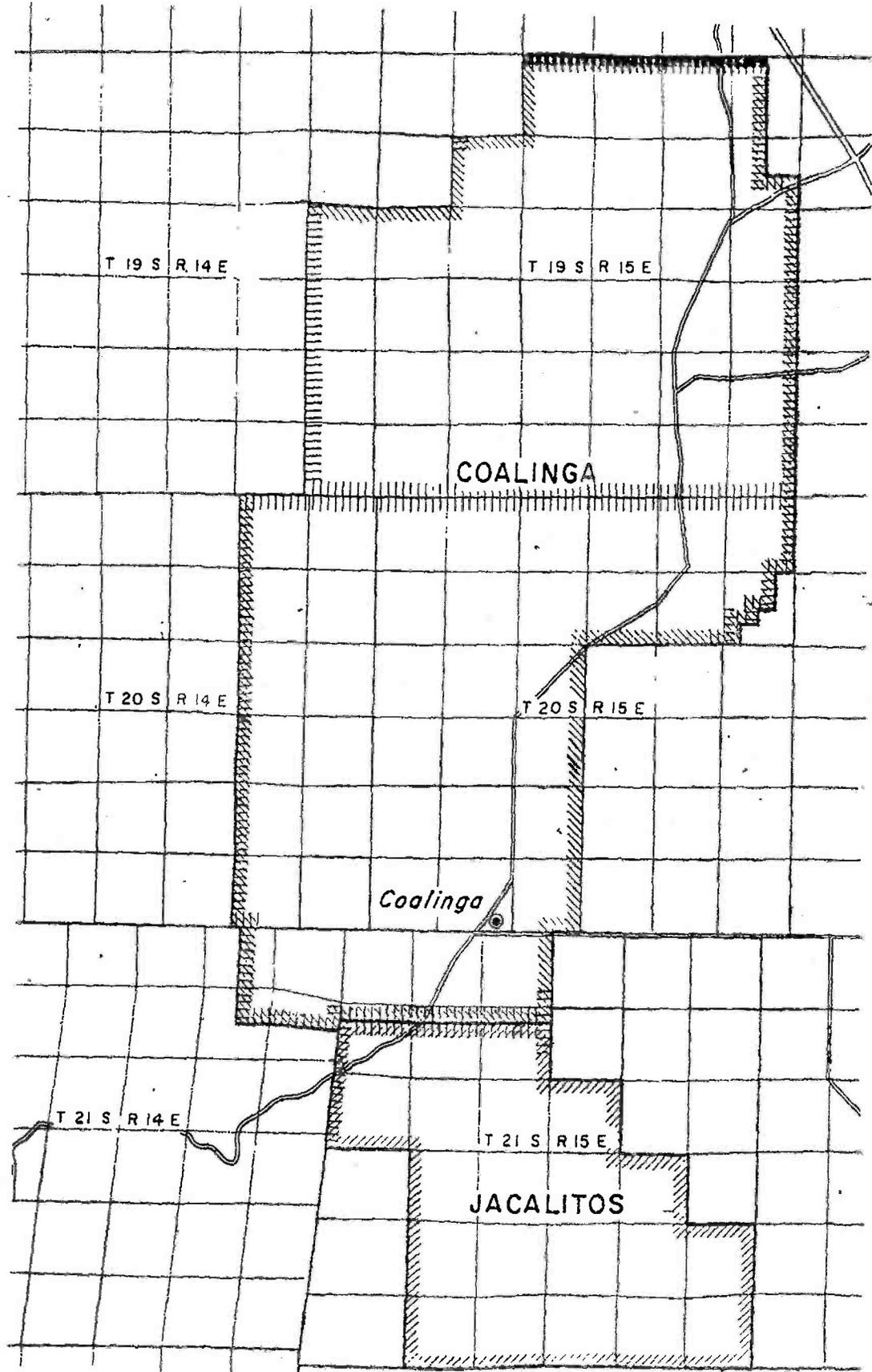
GUIJARRAL HILLS and KETTLEMAN NORTH DOME OIL FIELDS

Fresno and Kings County



Sheet 5

COALINGA and JACALITOS OIL FIELDS Fresno County

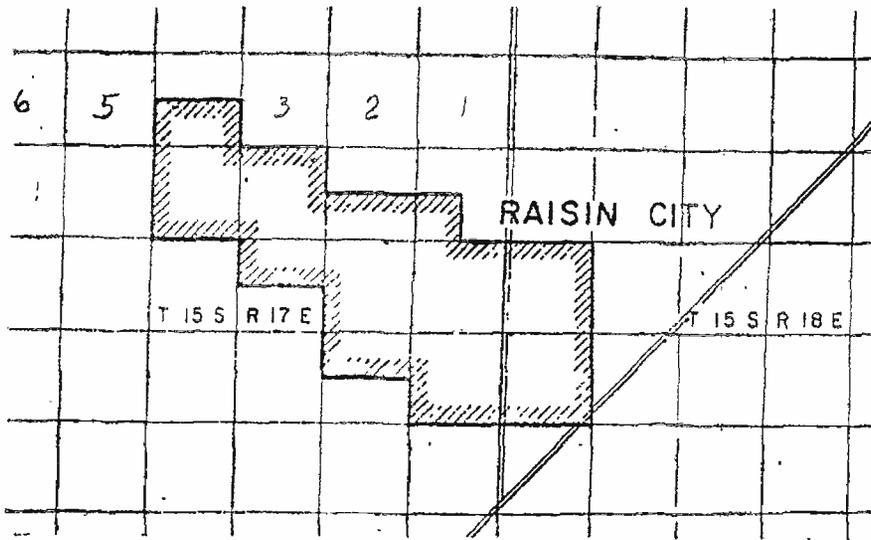


District 5

RAISIN CITY OIL FIELD

Fresno County

DIST 5

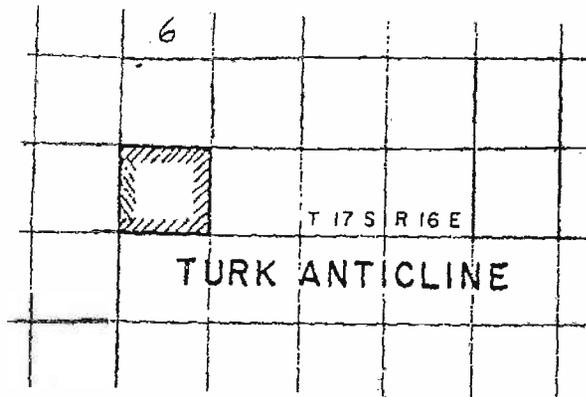


Sheet 5

TURK ANTICLINE OIL FIELD

Dist 5

Fresno County

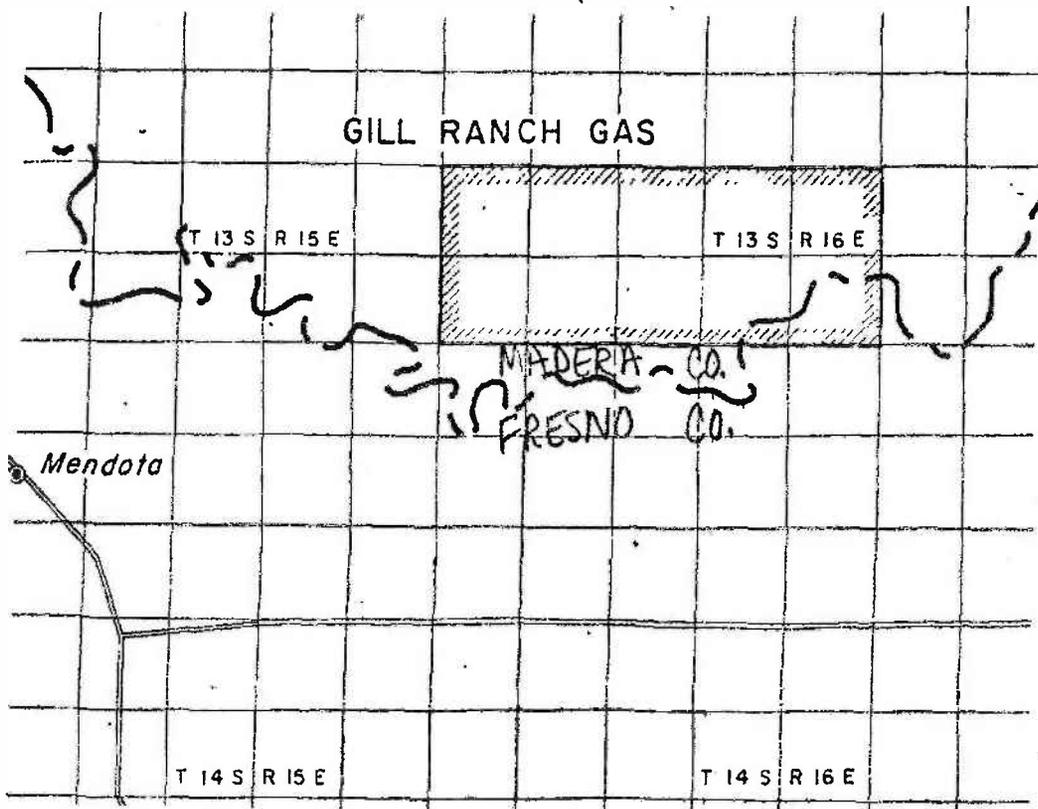


Sheet 5

GILL RANCH GAS FIELD

DIST 5

Fresno and Madera Counties

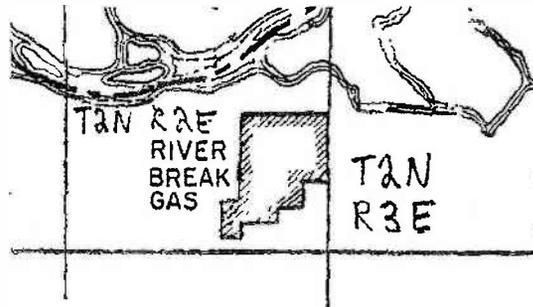


District 6

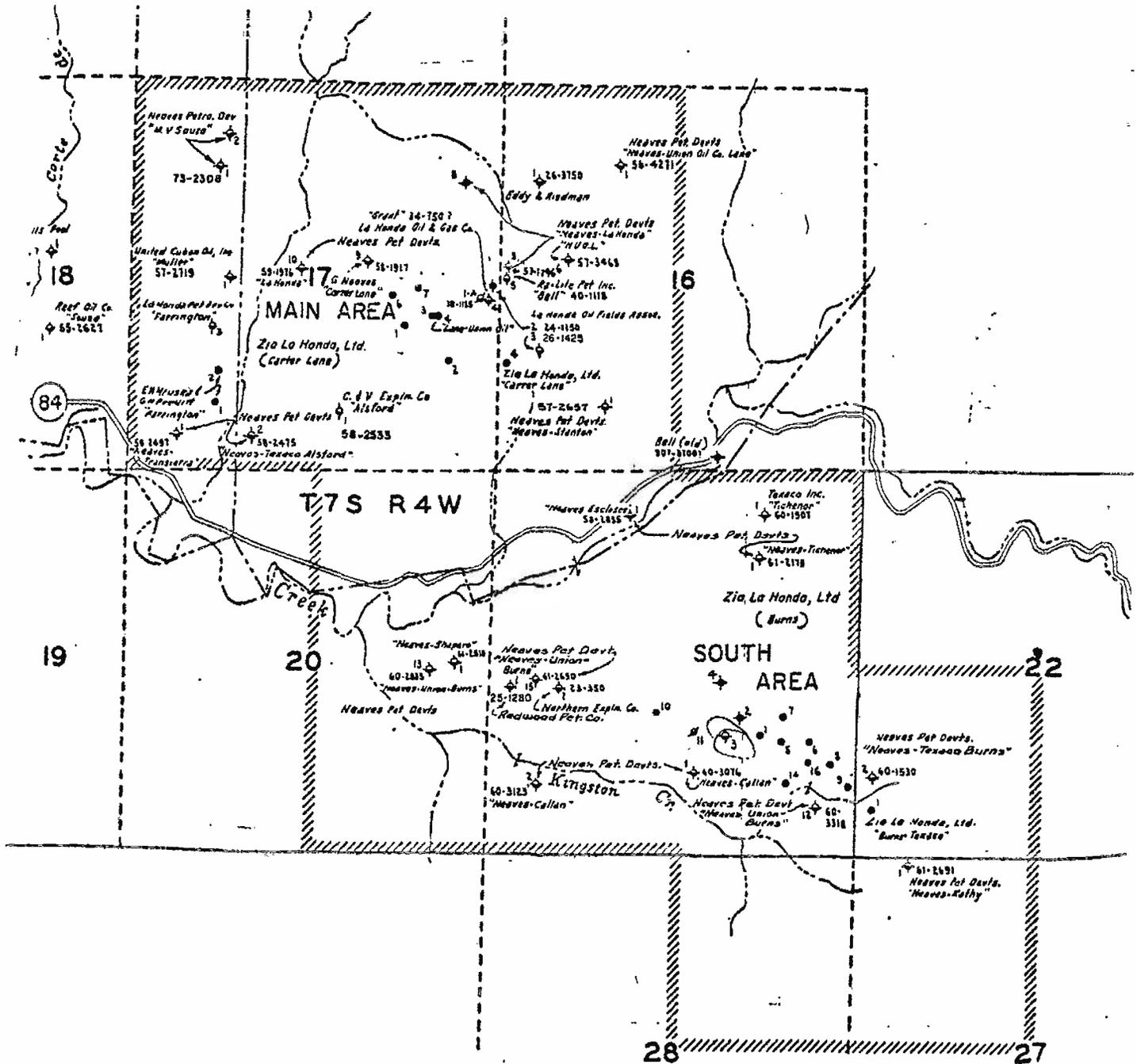
RIVER BREAK GAS FIELD

Contra Costa County

Dist 6



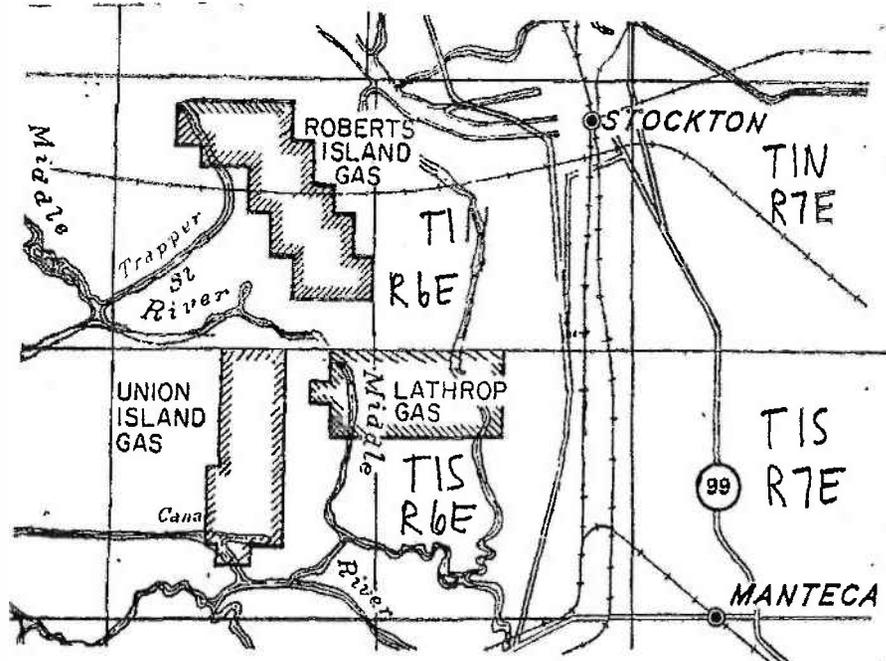
LA HONDA OIL FIELD San Mateo County



District 6

LATHROP, ROBERTS ISLAND, and UNION ISLAND GAS FIELDS San Joaquin County

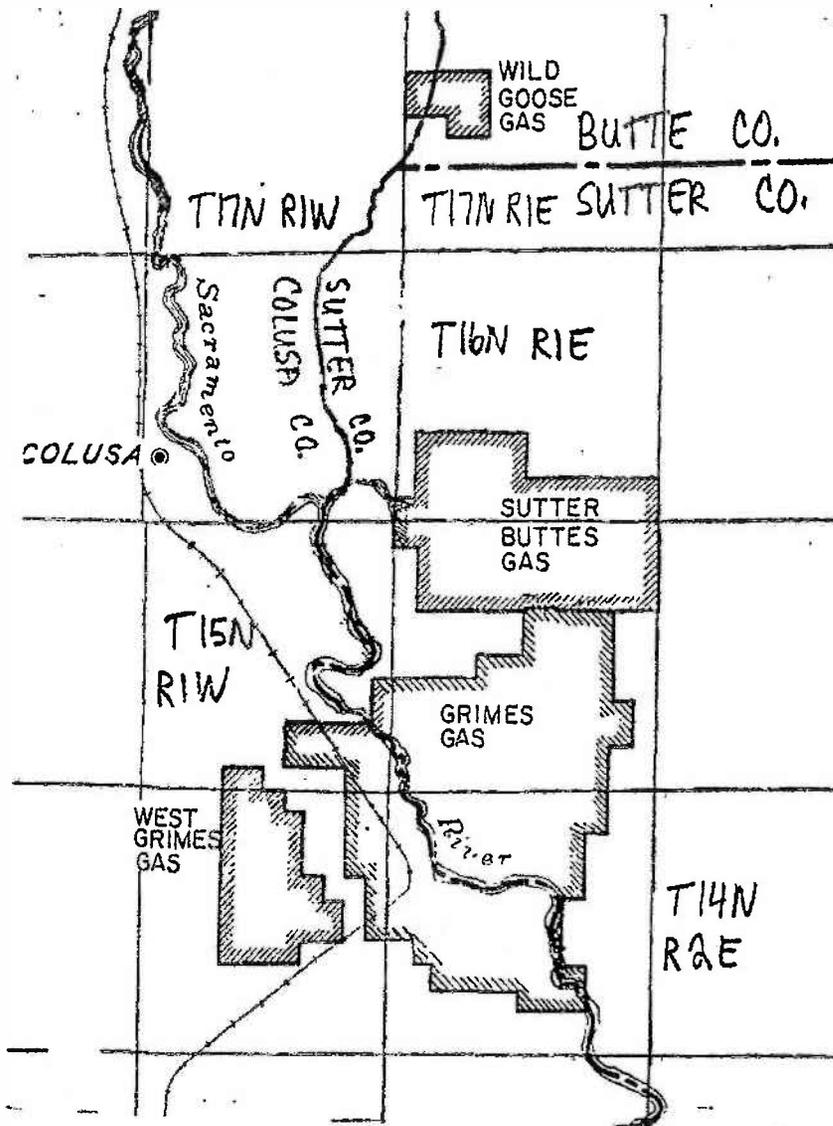
Dist 6



District 6

Dist 6

GRIMES, WEST GRIMES, SUTTER BUTTES,
and WILD GOOSE GAS FIELDS
Butte, Colusa, and Sutter Counties



Tract 6

Dist 6

BUNKER GAS FIELD

Solano County

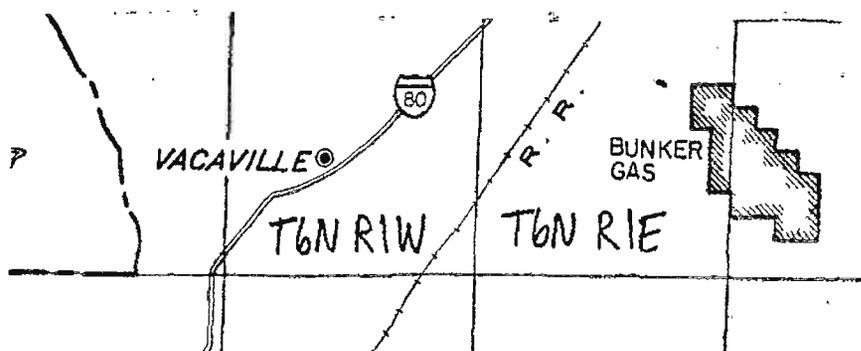


TABLE 2

Exempted Aquifers

Hydrocarbon Producing

(Supplement to aquifers exempted in Volumes 1 and 2 of
"California Oil and Gas Fields")

TABLE 2

Field	Formation	Location of discovery well (M.D.B.&M. unless noted)	Producing interval (drilled depth)	Discovery Date
Lowlume	Stevens (Miocene)	14 11N 22W (S.B.)	11,305 - 11,465	January 1974
Stone Lake Gas	Winters (Late Cretaceous)	1 6N 4E	7,062 - 7,103	November 1974
Wufour Gas	Starkey and Winters (Late Cretaceous)	28 11N 1E	3,704 - 4,401	January 1974
Ferritt Gas	Winters (Late Cretaceous)	15 9N 2E	5,527 - 5,542	November 1974
Rio Viejo	Stevens (Miocene)	34 12N 21W (S.B.)	14,060 - 14,136	October 1975
Mark Anticline	Temblor (Miocene)	18 17S 16E	10,081	June 1975
Barre Gas	Mokelumne River (Late Cretaceous)	4 2N 6E	4,401 - 4,403	Sept. 1975
Boorpark West	Sespe (Oligocene)	36 3N 20W (S.B.)	5,515 - 5,897	August 1976
Warneros Creek	Wygal (Miocene)	29 28S 20E	2,840 - 2,862	March 1976
Temblor Hills	Agua (Miocene) and Point of Rocks (Eocene)	25 30S 20E	3,850 - 4,116	November 1976
Modi Airport Gas	Capay (Eocene)	28 3N 6E	4,439 - 4,447	July 1976
Mariega Canyon	Monterey (Miocene)	21 8N 33W (S.B.)	8,024 - 9,570	August 1976
Sal Canal	Stevens (Miocene)	31 28S 22E	11,049 - 11,822	Sept. 1977
Greenwood Gas	Undiff. Marine (Eocene)	35 22N 3W	1,634 - 1,644	August 1977
Florin Gas	Winters (Late Cretaceous)	35 8N 5E	3,882 - 3,908	December 1977
Patlett Gas	Starkey (Late Cretaceous)	35 12N 3E	2,249 - 2,251	December 1977
Peace Valley Gas	Kiome (Late Cretaceous)	34 17N 1E	3,092 - 3,182	July 1977
Cache Creek Gas	Starkey (Late Cretaceous)	11 10N 2E	3,918 - 3,927	August 1977

TABLE 2

Field	Formation	Location of discovery well (M.D.B.&M. unless noted)	Producing interval (drilled depth)	Discovery Date
Westhaven	Templor (Miocene)	11 20S 18E	10,984 - 10,990	February 1978
Williams Gas	Forbes (Late Cretaceous)	12 16N 2W	5,305 - 5,317	Sept. 1978
Oakley, South, Gas	Mokelumne River (Late Cretaceous)	12 1N 2E	7,447 - 7,502	November 1972
Greenwood, South, Gas	Undiff. Marine (Eocene)	14 21N 3W	1,414 - 1,429	October 1977
East Collegeville Gas	Forbes (Late Cretaceous)	33 1N 8E	7,455 - 7,478	Sept. 1978
Lone Tree Creek Gas	Lathrop (Late Cretaceous)	17 1S 8E	6,804 - 6,810	May 1978
East Rice Creek Gas	Forbes (Late Cretaceous)	28 23N 2W	4,946 - 4,954	December 1978
Dry Slough Gas	Winters (Late Cretaceous)	9 8N 1E	5,026 - 5,030	February 1978
East Brentwood Gas	Mokelumne River (Late Cretaceous)	7 1N 3E	8,152 - 8,162	April 1979
East Dixon Gas	Mokelumne River (Lt. Cretaceous)	7 7N 2E	4,496 - 4,508	June 1979
Robbins Gas	Confidential	32 13N 3E	6,710 - 6,739	February 1979
Verona Gas	Markley Canyon fill (Miocene-Oligocene)	14 11N 3E	1,833 - 1,846	June 1979
Black Butte Dam Gas	Forbes (Late Cretaceous)	21 23N 4W	644 - 938	October 1979
Knightesen Gas	Mokelumne River (Late Cretaceous)	5 1N 3E	8,678 - 8,708	March 1980
Grays Bend Gas	Winters	31 11N 3E	4,460 - 4,490	January 1980
Harlan Ranch Gas	Confidential	13 9N 1E	Confidential	October 1980
Howells Point Gas	Confidential	5 12N 1E	Confidential	December 1980

EXHIBIT C

PAGE _____ OF _____

API: 02914276

Oper: Bennett Petroleum, Inc.

B3440

Opr Status: A

County: Kern



Field: Mountain View

490

Lease: Mott

Well#: 1



Area: Main Area

12

District: 4

Section: 9

Twn: 31S

Rng: 29E

BM: MD



Pool: Kern River-Chanac

05

Well Type: WD

Well Status: Idle

BLM:

Start: 12/1/1974

Pool Status: Active

Date	Stat	Water/Steam	Gas/Air	Days	Pressure	Water Source	WaterKind
01/2015	08	0	0				
Total 2015		0	0				
12/2014	08	0	0				
11/2014	08	0	0				
10/2014	08	0	0				
09/2014	08	0	0				
08/2014	08	0	0				
07/2014	08	0	0				
06/2014	08	0	0				
05/2014	08	0	0				
04/2014	08	0	0				
03/2014	08	0	0				
02/2014	08	0	0				
01/2014	08	0	0				
Total 2014		0	0				
12/2013	08	0	0				
11/2013	08	0	0				
10/2013	08	0	0				
09/2013	08	0	0				
08/2013	08	0	0				
07/2013	08	0	0				
06/2013	08	0	0				
05/2013	08	0	0				
04/2013	08	0	0				
03/2013	08	0	0				
02/2013	08	0	0				
01/2013	08	0	0				
Total 2013		0	0				
12/2012	08	0	0	0			
11/2012	08	0	0	0			
10/2012	08	0	0				
09/2012	08	0	0				
08/2012	08	0	0				
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05/2012	08	0	0				
04/2012	08	0	0				
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02/2012	08	0	0				
01/2012	08	0	0				
Total 2012		0	0	0			
12/2011	08	0	0				
11/2011	08	0	0				
10/2011	08	0	0				
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08/2011	08	0	0				
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06/2011	08	0	0				
05/2011	08	0	0				
04/2011	08	0	0				
03/2011	08	0	0				

02/2011	08	0	0				
01/2011	08	0	0				
Total 2011		0	0				
12/2010	08	0	0				
11/2010	08	0	0				
10/2010	08	0	0				
09/2010	08	0	0				
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05/2010	08	0	0				
04/2010	08	0	0				
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02/2010	08	0	0				
01/2010	08	0	0				
Total 2010		0	0				
12/2009	08	0	0				
11/2009	08	0	0				
10/2009	08	0	0				
09/2009	08	0	0				
08/2009	08	0	0				
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04/2009	08	0	0				
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02/2009	08	0	0				
01/2009	08	0	0				
Total 2009		0	0				
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11/2008	08	0	0				
10/2008	08	0	0				
09/2008	08	0	0				
08/2008	08	0	0				
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04/2008	08	0	0				
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02/2008	08	0	0				
01/2008	08	0	0				
Total 2008		0	0				
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11/2007	08	0	0				
10/2007	08	0	0				
09/2007	08	0	0				
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04/2007	08	0	0				
03/2007	08	0	0				
02/2007	08	0	0				
01/2007	08	0	0				
Total 2007		0	0				
12/2006	08	0	0				
11/2006	08	0	0				
10/2006	08	0	0				
09/2006	08	0	0				
08/2006	08	0	0				
07/2006	08	0	0				
06/2006	06	0	0				
05/2006	06	0	0				
04/2006	06	0	0				
03/2006	06	0	0				
02/2006		435	0	28	0	1	1
01/2006		410	0	31	0	1	1

Total 2006		15	0	59				
12/2005		00	0	31				
11/2005		394	0	30	0		1	1
10/2005		398	0	31	0		1	1
09/2005		367	0	30	0		1	1
08/2005		205	0	31	0		1	1
07/2005		220	0	31	0		1	1
06/2005		455	0	30			0	1
05/2005		430	0	31	0		1	1
04/2005		478	0	30	0		1	1
03/2005		449	0	31	0		1	1
02/2005		420	0	28	0		1	1
01/2005		360	0	31	0		1	1
Total 2005		4,576	0	365	0		1	1
12/2004	08	0	0					
11/2004	08	0	0					
10/2004		135	0	31	0		1	1
09/2004		148	0	30	0		1	1
08/2004		165	0	31	0		1	1
07/2004		180	0	31	0		1	1
06/2004		195	0	30	0		1	1
05/2004		210	0	31	0		1	1
04/2004		230	0	30	0		1	1
03/2004		202	0	31	0		1	1
02/2004		222	0	28	0		1	1
01/2004		280	0	31	0		1	1
Total 2004		1,967	0	304			1	1
12/2003		233	0	31	0		1	1
Total 2003		233	0	31				
06/1996	06	0	0	0			0	0
05/1996	06	0	0	0			0	0
04/1996	06	0	0	0			0	0
03/1996	06	0	0	0			0	0
02/1996	06	0	0	0			0	0
01/1996	06	0	0	0			0	0
Total 1996		0	0	0			0	0
11/1995	06	0	0	0	0		0	0
10/1995	06	0	0	0	0		0	0
09/1995	06	0	0	0	0		0	0
08/1995	06	0	0	0	0		0	0
07/1995	06	0	0	0	0		0	0
Total 1995		0	0	0	0		0	0
06/1994	06	0	0	0			0	0
05/1994	06	0	0	0			0	0
04/1994	06	0	0	0			0	0
03/1994	06	0	0	0			0	0
02/1994	06	0	0	0			0	0
01/1994	06	0	0	0			0	0
Total 1994		0	0	0			0	0
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11/1993	06	0	0	0			0	0
10/1993	06	0	0	0			0	0
09/1993	06	0	0	0			0	0
08/1993	06	0	0	0			0	0
07/1993	06	0	0	0			0	0
06/1993	06	0	0	0			0	0
05/1993	06	0	0	0			0	0
04/1993	06	0	0	0			0	0
03/1993	06	0	0	0			0	0
02/1993	06	0	0	0			0	0
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Total 1993		0	0	0			0	0
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01/1992	06	0	0	0			0	0
01/1992	06	0	0	0			0	0
01/1992	06	0	0	0			0	0
01/1992	06	0	0	0			0	0

07/1992	06	0	0	0	0	0	0
06/1992	06	0	0	0	0	0	0
05/1992	06	0	0	0	0	0	0
04/1992	06	0	0	0	0	0	0
03/1992	06	0	0	0	0	0	0
02/1992	06	0	0	0	0	0	0
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Total 1992		0	0	0	0	0	0
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08/1991	06	0	0	0	0	0	0
07/1991	06	0	0	0	0	0	0
06/1991	06	0	0	0	0	0	0
05/1991	06	0	0	0	0	0	0
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03/1991	06	0	0	0	0	0	0
02/1991	06	0	0	0	0	0	0
01/1991	06	0	0	0	0	0	0
Total 1991		0	0	0	0	0	0
12/1990	01	0	0	0	0	0	0
11/1990	06	0	0	0	0	0	0
10/1990	06	0	0	0	0	0	0
09/1990	06	0	0	0	0	0	0
08/1990	06	0	0	0	0	0	0
07/1990	06	0	0	0	0	0	0
06/1990	06	0	0	0	0	0	0
05/1990	06	0	0	0	0	0	0
04/1990	06	0	0	0	0	0	0
03/1990	06	0	0	0	0	0	0
02/1990	06	0	0	0	0	0	0
01/1990	06	0	0	0	0	0	0
Total 1990		0	0	0	0	0	0
12/1989	06	0	0	0	0	0	0
11/1989	06	0	0	0	0	0	0
10/1989	06	0	0	0	0	0	0
09/1989	06	0	0	0	0	0	0
08/1989	06	0	0	0	0	0	0
07/1989	06	0	0	0	0	0	0
06/1989	06	0	0	0	0	0	0
05/1989	06	0	0	0	0	0	0
04/1989	06	0	0	0	0	0	0
03/1989	06	0	0	0	0	0	0
02/1989	06	0	0	0	0	0	0
01/1989	06	0	0	0	0	0	0
Total 1989		0	0	0	0	0	0
12/1988	00	8,575	0	31	250	1	4
11/1988	00	5,000	0	30	260	1	4
10/1988	06	0	0	0	0	0	0
09/1988	06	0	0	0	0	0	0
08/1988	06	0	0	0	0	0	0
07/1988	06	0	0	0	0	0	0
06/1988	06	0	0	0	0	0	0
05/1988	00	1,860	0	15	185	1	4
04/1988	00	2,780	0	30	190	1	4
03/1988	00	2,460	0	31	160	0	0
02/1988	00	4,050	0	15	150	1	4
01/1988	00	600	0	10	150	1	4
Total 1988		25,325	0	162	150	1	4
12/1987	00	2,000	0	15	150	1	4
11/1987	00	1,600	0	15	100	1	4
10/1987	00	1,040	0	15	100	1	4
09/1987	06	0	0	0	0	0	0
08/1987	06	0	0	0	0	0	0
07/1987	06	0	0	0	0	0	0
06/1987	06	0	0	0	0	0	2

05/1987	06	0	0	0	0	0	0	0
04/1987	06	0	0	0	0	0	0	0
03/1987	06	0	0	0	0	0	0	0
02/1987	06	0	0	0	0	0	0	0
01/1987	06	0	0	0	0	0	0	0
Total 1987		4,640	0	45				
12/1986	06	0	0	0	0	0	0	0
11/1986	06	0	0	0	0	0	0	0
10/1986	06	0	0	0	0	0	1	1
09/1986	06	0	0	0	0	0	1	1
08/1986	06	0	0	0	0	0	1	1
07/1986	06	0	0	0	0	0	1	1
06/1986	06	0	0	0	0	0	1	1
05/1986	06	0	0	0	0	0	1	1
04/1986	06	0	0	0	0	0	1	1
03/1986	06	0	0	0	0	0	1	1
02/1986	06	0	0	0	0	0	1	1
01/1986	06	0	0	0	0	0	1	1
Total 1986		0	0	0	0	0	1	1
12/1985	06	0	0	0	0	0	1	1
11/1985	06	0	0	0	0	0	1	1
10/1985	06	0	0	0	0	0	1	1
09/1985	06	0	0	0	0	0	1	1
08/1985	06	0	0	0	0	0	1	1
07/1985	06	0	0	0	0	0	1	1
06/1985	06	0	0	0	0	0	1	1
05/1985	06	0	0	0	0	0	1	1
04/1985	06	0	0	0	0	0	1	1
03/1985	06	0	0	0	0	0	1	1
02/1985	06	0	0	0	0	0	1	1
01/1985	06	0	0	0	0	0	1	1
Total 1985		0	0	0	0	0	1	1
12/1984	06	0	0	0	0	0	1	1
11/1984	06	0	0	0	0	0	1	1
10/1984	06	0	0	0	0	0	1	1
09/1984	06	0	0	0	0	0	1	1
08/1984	06	0	0	0	0	0	1	1
07/1984	06	0	0	0	0	0	1	1
06/1984	06	0	0	0	0	0	1	1
05/1984	06	0	0	0	0	0	1	1
04/1984	06	0	0	0	0	0	1	1
03/1984	06	0	0	0	0	0	1	1
02/1984	06	0	0	0	0	0	1	1
01/1984	06	0	0	0	0	0	1	1
Total 1984		0	0	0	0	0	1	1
12/1983	06	0	0	0	0	0	1	1
11/1983	06	0	0	0	0	0	1	1
10/1983	06	0	0	0	0	0	1	1
09/1983	06	0	0	0	0	0	1	1
08/1983	06	0	0	0	0	0	1	1
07/1983	06	0	0	0	0	0	1	1
06/1983	06	0	0	0	0	0	1	1
05/1983	06	0	0	0	0	0	1	1
04/1983	06	0	0	0	0	0	1	1
03/1983	06	0	0	0	0	0	1	1
02/1983	06	0	0	0	0	0	1	1
01/1983	06	0	0	0	0	0	1	1
Total 1983		0	0	0	0	0	1	1
12/1982	06	0	0	0	0	0	1	1
11/1982	06	0	0	0	0	0	1	1
10/1982	06	0	0	0	0	0	1	1
09/1982	06	0	0	0	0	0	1	1
08/1982	06	0	0	0	0	0	1	1
07/1982	06	0	0	0	0	0	1	1
06/1982	06	0	0	0	0	0	1	1
05/1982	06	0	0	0	0	0	4	4
		0	0	0	0	0	1	1

04/1982	00	39	0	30	2000	1	1
03/1982	00	26	0	31	1975	1	1
02/1982	00	3,868	0	28	1975	1	1
01/1982	00	3,347	0	31	1555	1	1
Total 1982		14,080	0	120			
12/1981	00	3,593	0	11	2000	1	1
11/1981	00	3,522	0	11	2100	1	1
10/1981	00	3,474	0	10	2200	1	1
09/1981	00	2,394	0	10	2200	1	1
08/1981	00	3,407	0	31	2200	1	2
07/1981	00	4,406	0	31	2200	1	2
06/1981	00	11,928	0	30	2225	1	2
05/1981	00	8,697	0	31	2200	1	2
04/1981	00	4,891	0	30	2200	1	2
03/1981	00	4,059	0	31	1800	1	2
02/1981	00	2,565	0	28	1200	1	2
01/1981	00	2,539	0	31	1200	1	2
Total 1981		55,475	0	285			
12/1980	00	2,651	0	31	1200	1	2
11/1980	00	2,670	0	30	1200	1	2
10/1980	00	2,657	0	31	1200	1	2
09/1980	00	2,385	0	30	1200	1	2
08/1980	00	2,705	0	31	1200	1	2
07/1980	00	2,557	0	31	1200	1	1
06/1980	00	3,090	0	30	1200	1	1
05/1980	00	3,143	0	31	1200	1	1
04/1980	00	3,090	0	30	1200	1	1
03/1980	00	3,193	0	31	1200	1	1
02/1980	00	2,987	0	29	1200	1	1
01/1980	00	3,073	0	31	1200	1	1
Total 1980		34,201	0	366			
12/1979	00	3,682	0	31	1200	1	1
05/1979	00	2,382	0	31	530	1	1
04/1979	00	2,567	0	30	500	1	1
03/1979	00	2,189	0	31	500	1	1
02/1979	00	2,380	0	28	500	1	1
01/1979	00	3,110	0	31	490	1	1
Total 1979		16,310	0	182			
12/1978	00	3,131	0	31	600	1	1
11/1978	00	2,946	0	30	620	1	1
10/1978	00	2,645	0	31	600	1	1
09/1978	00	1,795	0	30	590	1	1
07/1978	00	2,273	0	31	560	1	2
06/1978	00	2,400	0	30	585	1	1
05/1978	00	2,462	0	31	600	1	1
04/1978	00	2,370	0	30	620	1	1
03/1978	00	2,480	0	31	610	1	1
02/1978	00	2,066	0	28	640	1	1
01/1978	00	2,338	0	31	650	1	1
Total 1978		26,906	0	334			
12/1977	00	2,227	0	31	650	1	1
11/1977	00	2,220	0	30	650	1	1
10/1977	00	2,418	0	31	670	1	1
09/1977	00	2,166	0	30	610	1	1
08/1977	00	2,220	0	31	620	1	1
07/1977	00	2,356	0	31	600	1	1
06/1977	00	2,280	0	30	510	1	1
05/1977	00	2,222	0	0	650	1	1
04/1977	00	2,242	0	30	0	1	1
03/1977	00	2,170	0	15	700	1	2
02/1977	00	660	0	10	0	1	1
01/1977	06	0	0	0	0	1	2
Total 1977		23,181	0	269			

EXHIBIT D

PAGE _____ OF _____

REPORT NO. TR11

CALIFORNIA OIL AND GAS FIELDS

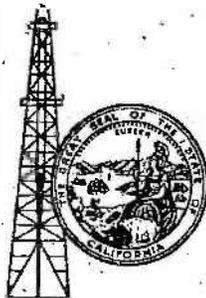
VOLUME 1 North and East Central California

A Publication of the
CALIFORNIA DIVISION OF OIL AND GAS

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HOW TO USE THIS VOLUME

Volume I consists of oil and gas field maps and data sheets arranged alphabetically by the API regions North California and East Central California, shown on the index map on page vii. Turn to the index map first to determine in which region the field is located, then use the index tabs to find the region. All data sheets are arranged alphabetically; however, North Coles Levee will be found listed as Coles Levee, North, etc. Regional cross sections are found at the beginning of each regional section, as are the index maps outlining the productive areas of all fields in the region.

STATE OF CALIFORNIA
RONALD REAGAN, *Governor*

THE RESOURCES AGENCY
N. B. LIVERMORE, JR., *Secretary for Resources*

DEPARTMENT OF CONSERVATION
RAY B. HUNTER, *Director*

DIVISION OF OIL AND GAS
J. F. MATTHEWS, JR.
STATE OIL AND GAS SUPERVISOR
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Cover Design by Robert L. Johnson

INTRODUCTION

This volume is a compilation of oil and gas field geologic maps and statistical data for all fields in the API regions of North California and East Central California (see index map on page vii). It exhibits a departure in format from the original map and data sheet publication which first appeared in October 1960. Aside from the loose leaf format, which will permit planned periodic updating, many other changes have been made. For example, a typical or composite electric log is shown for most fields; and additional statistical data have been added.

This volume was prepared under the supervision of Raymond V. Rothemel, Publications Officer. George J. Borkovich, Northern Region Staff Engineer, coordinated the project, and Simon Cordova, Woodland staff engineer, was the editor of geologic names. Division of Oil and Gas Northern Region engineers in the Bakersfield, Coalinga, Woodland and Santa Maria offices participated in the preparation of the maps and data sheets and other personnel did the drafting, layout, and typing, therefore individual recognition would not be practical here. Contributions by companies and individuals not employed by the division are credited on those map sheets involved.

MAJOR OCCURRENCES OF OIL AND GAS

SAN JOAQUIN VALLEY

Oil and associated wet gas occur largely in the Miocene and Pliocene, with lesser quantities in the Eocene and Pleistocene Series, and very minor quantities in the Oligocene, Jurassic and Cretaceous Systems. Dry gas occurrence is minor, being found primarily in the Pliocene, Eocene and Upper Cretaceous.

SACRAMENTO VALLEY AND OTHER NORTHERN CALIFORNIA BASINS

Dry gas occurs largely in the Eocene, Paleocene and Upper Cretaceous, with a lesser amount in the Pliocene and Miocene Series. Oil, which is very minor, occurs in Pliocene, Miocene, Eocene, Paleocene, and Upper Cretaceous strata.

EXPLANATIONS

MAP SHEETS

Typical log - A single electric log of a typical well in a particular oil or gas field. For convenience, long sections not needed for correlation purposes may have been removed in some logs. This is shown by the "~~~~~" symbol.

Composite log - Consists of a composite of two or more electric logs and is representative of the stratigraphy of a particular oil or gas field. Sections removed are shown by the symbol "~~~~~".

Note: Some typical or composite logs may be taken from wells outside administrative field boundaries and may therefore have greater depth than the deepest well in the field.

Productive area - Productive area may be shown in one of two ways:

- 1) By inference from well symbols placed on the contour map.
- 2) By shading (see legend) on contour map. Shading is also used on cross sections to indicate productive zones.

Productive area, as shown on contour maps, is the *maximum* productive area as of January 1, 1973. Productive area shown on index maps is generalized.

Contour map - Depth datum is sea level.

Contour map legend:

-  Drilling
-  Drilling - idle
-  Abandoned - dry hole
-  Producing - oil
-  Idle - oil
-  Abandoned - oil
-  Producing - gas
-  Idle - gas
-  Abandoned - gas
-  Water disposal
-  Oil well converted to water disposal
-  Intersection of bore-hole and contoured horizon
-  Productive area
-  Contour line (good control)
-  Contour line (poor control)
-  Axis of anticline
-  Axis of syncline
-  Fault
-  Possible fault
-  Fault dip direction
-  Fault movement (+ up, - down)
-  Fault movement (lateral)

Cross section legend:

-  Oil zones
-  Gas zones

	Correlation line (good control)
	Correlation line (poor control)
	Unconformity
	Fault
	Possible fault
	Fault movement (up/down)
	Fault movement (● toward observer, + away from observer)

Scales - Map scales can generally be inferred from public land survey data. When such an inference cannot be drawn, a map scale is shown.

Note: Cross sections depicted schematically are not necessarily drawn to scale.

DATA SHEETS

Most listed items are self explanatory. A few, however, need additional elaboration.

Discovery data - Zones are listed in stratigraphic sequence.

Producing zones - The average depth means the *average* area or field depth to the *top* of the productive zone. The average net thickness means the average *productive* thickness of the zone and is only an approximation.

Class BOPE required - Division of Oil and Gas blowout prevention equipment class requirements, copies of which are available from any Division of Oil and Gas office. However, classes shown should be used only as a guide, *and do not represent final determination of blowout equipment required* on any particular well. There are 5 classes, Class I through V. The higher the class number, the more stringent the requirements.

Spacing Act - Refers to the application of Chapter 3, Division 3 of the Public Resources Code, *Spacing of Wells and Community Leases*. Final determination of well spacing requirements is made by the State Oil and Gas Supervisor and entries under "Spacing Act" *do not represent final judgement of whether or not the Spacing Act applies*.

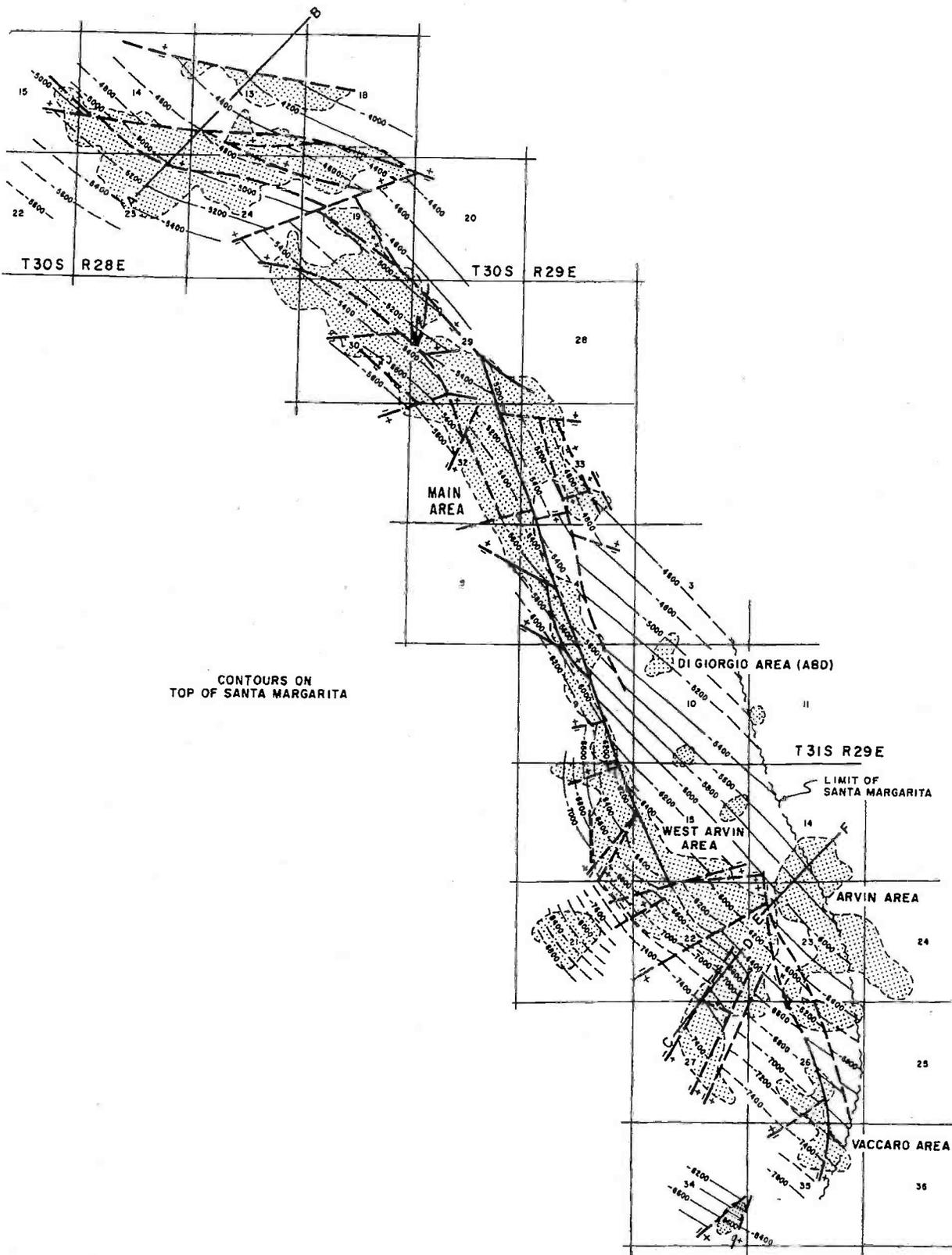
LIST OF ABBREVIATIONS

B&M	Base and Meridian
MD	Mount Diablo
SB	San Bernardino
H	Humboldt
psig	pounds per square inch (gauge)
bbl	barrels (42 U.S. gallons)
Mcf	1000 cubic feet
btu	British thermal unit
gr/gal	grains per gallon

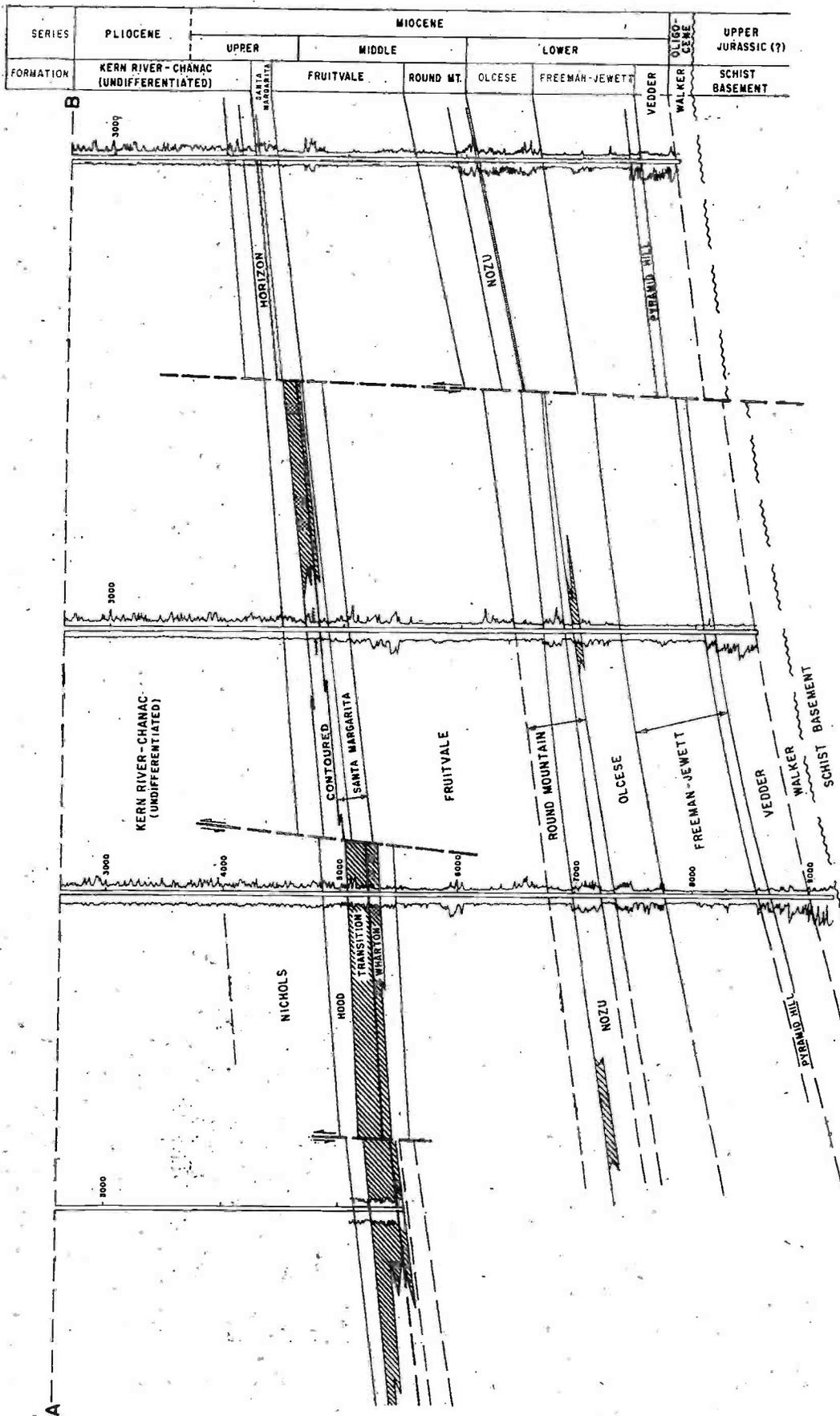
cem.	cemented
N.A.	not available
--	not applicable
Abd.	Abandoned
Holo.	Holocene
Pleis.	Pleistocene
Plio.	Pliocene
Mio.	Miocene
Olig.	Oligocene
Eo.	Eocene
Paleoc.	Paleocene
Cret.	Cretaceous
Jur.	Jurassic
E or e*	early
M or m*	middle
L or l*	late
undiff.	undifferentiated

* Capitals are used for system age; lower case for series age.

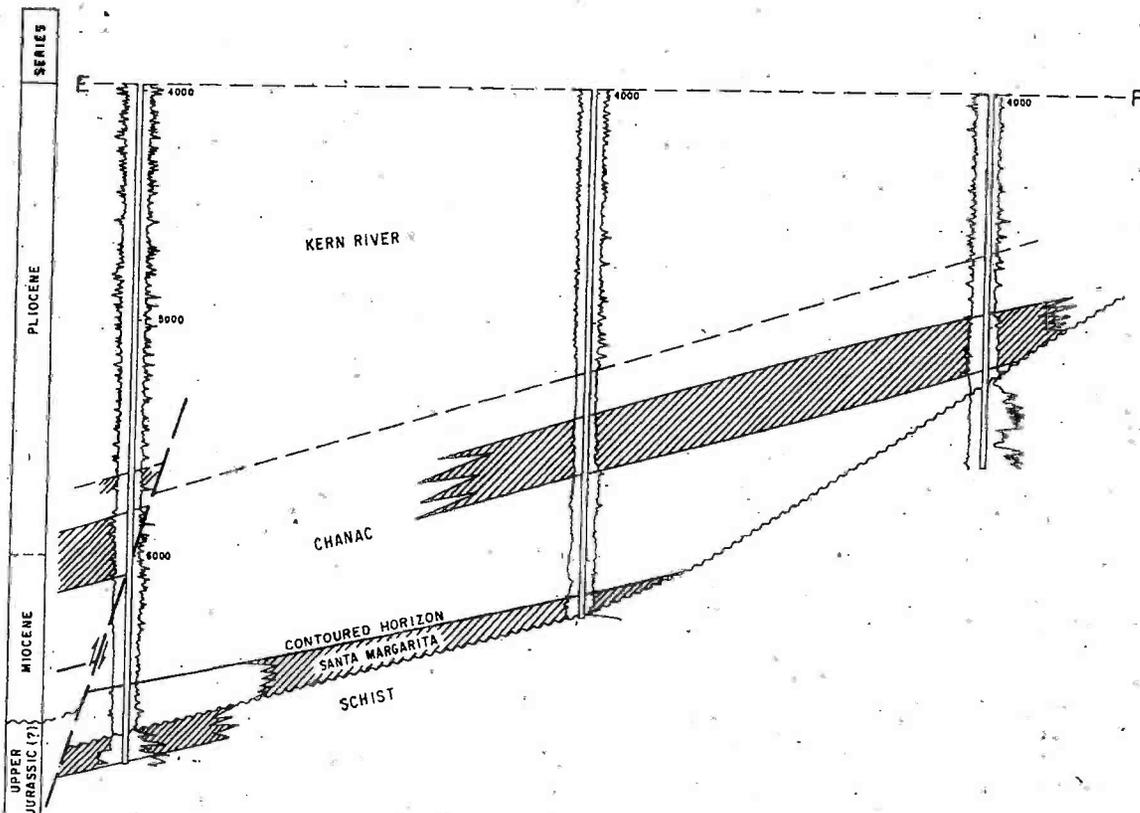
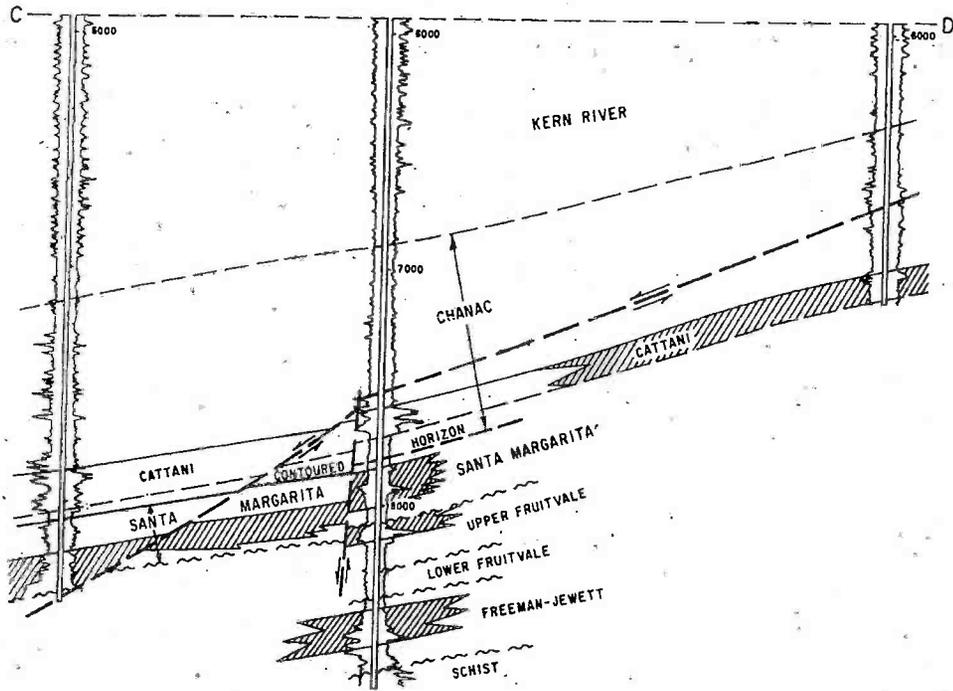
MOUNTAIN VIEW OIL FIELD



MOUNTAIN VIEW OIL FIELD



MOUNTAIN VIEW OIL FIELD



CALIFORNIA DIVISION OF OIL AND GAS

MOUNTAIN VIEW OIL FIELD

Kern County

LOCATION: 4 miles southeast of Bakersfield

TYPE OF TRAP: See areas

ELEVATION: 450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Santa Margarita	Chester F. Dolley "Wharton" 1	Hogan Petroleum Co. "Wharton" 1	32 30S 29E	MD	3,200	N.A.	May 1933

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif., Opr. "Stenderup" 55X-21	Union Oil Co. of Calif., Opr. "Union-Hancock Stenderup" 55X-21	Jul 1956	21 31S 29E	MD	12,514	Freeman-Jewett	early Mio

PRODUCING ZONES (See areas)

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water gr/gal	Class BOPE required
			Age	Formation			

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved acreage	1972 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (tbt)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
714,021	565,013	2,410,708	2,660	188	78,563,063	82,369,452	9,371,651	1936	794	621	4,655

STIMULATION DATA (Jan. 1, 1973) (See areas)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: See areas.

BASE OF FRESH WATER: See areas.

CURRENT CASING PROGRAM: See areas.

METHOD OF WASTE DISPOSAL: See areas.

REMARKS: The Santa Margarita oil zone has also been referred to as Hogan or Wharton.

REFERENCES:

CALIFORNIA DIVISION OF OIL AND GAS

MOUNTAIN VIEW OIL FIELD

ARVIN AREA

Kern County

LOCATION: See map sheet of Mountain View Oil Field

TYPE OF TRAP: Sand buttressing against older high; lithofacies variations

ELEVATION: 450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Chanac Santa Margarita Schist	Frank Goldman "H.S. Jewett" 2	The Texas Co. "H.S. Jewett" 2	23 31S 29E	MD	42	N.A.	Jan 1953
	Frank Goldman "Arvin Waterflood Unit" G 1	The Texas Co. "George" 1	23 31S 29E	MD	142	85	Jul 1951
	Frank Goldman "George" 4	The Texas Co. "George" 4	23 31S 29E	MD	35	25	Mar 1952

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Frank Goldman "H.S. Jewett" 3	The Texas Co. "H.S. Jewett" 3	Oct 1953	23 31S 29E	MD	7,133	Basement (schist)	Late Jur (?)

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Chanac	5,500	300	e Plio - lt Mio	Chanac	26 - 33	560	III
Santa Margarita	6,100 - 6,500	100	late Miocene	Santa Margarita	35	N.A.	III
Schist	5,700 - 7,100	100	Lt Jurassic (?)	Schist	29	N.A.	III

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved acreage	1972 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
51,073	41,766	114,667	360	13	3,771,245	7,369,954	722,491	1955	74	62	675

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: 2,800

CURRENT CASING PROGRAM: 10 3/4" cem. 700; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: 5,831 bbl. of waste water was injected during 1972 into one disposal well; evaporation and percolation sumps.

REMARKS: A water flood of the Chanac and Santa Margarita zones was started in 1959 and terminated in 1968; cumulative injection totaled 1,600,586 bbls.

REFERENCES: Matthews, J.F. Jr., Arvin and Vaccaro Areas of Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).

CALIFORNIA DIVISION OF OIL AND GAS

MOUNTAIN-VIEW OIL FIELD

ARVIN, WEST, AREA

Kern County

LOCATION: See map sheet of Mountain View Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies variations; sand truncation and overlap.

ELEVATION: 450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Chanac - Cattani	Standard Oil Co. of Calif. "Jewett Community Lease No. 2" 1	Standard Oil Co. of Calif. "Jewett Community" 1	16 31S 29E	MD	2,988	1,390	Feb 1939
Cattani	Jim Riley "Houchin" 1	General Petroleum Corp. of Calif. "Houchin" 1	27 31S 29E	MD	123	N.A.	Dec 1937
Houchin	Union Oil Co. of Calif., Opr. "Houchin-Giumarra" 77-27	Union Oil Co. of Calif., Opr. "Union-Hancock Houchin-Giumarra" 77-27	27 31S 29E	MD	85	50	Apr 1957
Stenderup	Union Oil Co. of Calif., Opr. "Stenderup" 55X-21	Union Oil Co. of Calif., Opr. "Union-Hancock Stenderup" 55X-21	21 31S 29E	MD	1,170	800	Oct 1956
Frick	Kenneth Sperry, Opr. "Norris-Frick" 41-16	Norris Oil Co. "Norris Frick" 41-16	16 31S 29E	MD	65	N.A.	Apr 1959
Brite	Union Oil Co. of Calif., Opr. "Shaffer Brite" 77-16	Union Oil Co. of Calif., Opr. "Union-Hancock Shaffer-Brite" 77-16	16 31S 29E	MD	420	265	Dec. 1958

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Union Oil Co. of Calif., Opr. "Stenderup" 55X-21	Union Oil Co. of Calif., Opr. "Union-Hancock Stenderup" 55X-21	Jul 1956	21 31S 29E	MD	12,514	Freeman-Jewett	early Mio.

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (lb/cu ft))	Salinity of zone water (g/gal)	Class BOPE required
			Age	Formation			
Chanac - Cattani	6,100	60	early Pliocene	Chanac	31	100	III
Cattani	7,100	130	early Pliocene	Chanac	30	N.A.	III
Houchin	8,100	150	late Miocene	Santa Margarita	35	N.A.	IV
Stenderup	9,600	200	early Miocene	Fruitvale	28	N.A.	IV
Frick	8,900	120	early Miocene	Olcese	27	N.A.	IV
Brite	8,300	250	early Miocene	Freeman-Jewett	35	N.A.	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved acreage	1972 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
123,171	122,753	107,281	530	32	9,414,813	13,958,840	769,822	1947	193	157	900

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: 2,500.

CURRENT CASING PROGRAM: 10 3/4" cem. 600 - 1,000; 7" or 5 1/2" combination string landed through zone and cem. through ports above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS: A water flood of the Cattani zone was started in 1957 and terminated in 1962; cumulative injection totals 449,348 bbls.

REFERENCES: Matthews, J.F. Jr., West Arvin Area of Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 48, No. 1 (1962).

CALIFORNIA DIVISION OF OIL AND GAS

DIGIORGIO AREA (Abandoned)

MOUNTAIN VIEW OIL FIELD

Kern County

LOCATION: See map sheet of Mountain View Oil Field

TYPE OF TRAP: Angular unconformity; lithofacies variations.

ELEVATION: 450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & H	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Santa Margarita Schist	Reserve Oil & Gas Co. "Earl Fruit Co." 1 Terminal Oil Co. "DiGiorgio" 3-1	Mohawk Petroleum Co. "Earl Fruit Co." 1 Same as present	10 31S 29E	MD	182	650	Aug 1936
			3 31S 29E	MD	26	N.A.	Nov 1955

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & H	Depth (feet)	At total depth	
						Strata	Age
The Superior Oil Co. "Cal Pride Farms" 1	Same	Apr 1956	15 31S 29E	MD	6,694	Basement (schist)	Late Jur (?)

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity ("API" or Gas (btu))	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Santa Margarita Schist	6,000	50	late Miocene	Santa Margarita	33	N.A.	IV
	5,800	100	Lt Jurassic (?)	Schist	26	N.A.	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved acreage	1972 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
0	0	0	0	0	115,769	43,062	15,605	1948	20	9	70

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: 2,000 - 2,400

CURRENT CASING PROGRAM: 10 3/4" cem. 600; 7" combination string landed through zone and cem. through ports above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL:

REMARKS: The last production from the area was in 1959.

REFERENCES: Miller, R.H., and C.V. Bloom, Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 22, No. 4 (1937).

CALIFORNIA DIVISION OF OIL AND GAS

MOUNTAIN VIEW OIL FIELD

MAIN AREA

Kern County

LOCATION: See map sheet of Mountain-View Oil Field

TYPE OF TRAP: Faulted homocline; angular unconformity; lithofacies variations.

ELEVATION: 450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Nichols	Operator name and well number unknown	Operator name and well number unknown	N.A.	MD	N.A.	N.A.	N.A.
Hood	Same as above	Same as above	N.A.	MD	N.A.	N.A.	N.A.
Transition	Same as above	Same as above	N.A.	MD	N.A.	N.A.	N.A.
Wharton	Chester F. Dolley "Wharton" 1	Hogan Petroleum Co. "Wharton" 1	32 30S 29E	MD	3,200	N.A.	May 1933
Nozu	Pyramid Oil Co. "Atlantic Wible" 3	MJM & M Oil Co. "Atlantic Wible" 3	23 30S 28E	MD	385	N.A.	Apr 1953
Olcese	BP Exploration U.S.A. Inc. "Winters" 46	Kern Oil Calif. Limited "Winters" 46	13 30S 28E	MD	49	25	May 1958
Schist	Getty Oil Co. "Pacific Western P.H. Greer" 53	Pacific Western Oil Co. "Pacific Western P.H. Greer" 53	9 31S 29E	MD	244	600	Dec 1947

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Getty Oil Co. "Frick-Hogan" 23-9	Pacific Western Oil Corp. "Frick-Hogan" 23-9	Sep 1955	9 31S 29E	MD	10,619	Walker	Olig - Eo

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (°API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Nichols	4,900	300	e Plio-lt Mio	Chanac	17 - 27	30	III
Hood	5,200	100	e Plio-lt Mio	Chanac	25	30	III
Transition	5,400	200	e Plio-lt Mio	Transition	25	30	III
Wharton	5,500	65	late Miocene	Santa Margarita	23	620	III
Nozu	7,300	40	n Miocene	Round Mountain	35	1,150	IV
Olcese	7,000	60	m Miocene	Olcese	32	N.A.	IV
Schist	7,275	75	Lt Jurassic (?)	Schist	45	N.A.	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved acreage	1972 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
526,725	396,885	2,181,652	1,710	139	64,467,521	60,429,355	9,364,753	1936	483	380	2,880

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection
Water Flood	1965	1,776,268	4

SPACING ACT: Applies

BASE OF FRESH WATER: 1,150 - 4,800

CURRENT CASING PROGRAM: 10 3/4" cem. 500 - 800; 7" cem. above zone and across base of fresh-water sands; 5 1/2" liner landed through zone.

METHOD OF WASTE DISPOSAL: Waste water is used in the water flood project; also evaporation and percolation sumps.

REMARKS: The Wharton zone is also locally known as the Hogan.

REFERENCES: Miller, R.H., and C.V. Bloom, Mountain View Oil Field; Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 22, No. 4 (1937).

Park, W.H., Main Area of Mountain View Oil Field; Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 52, No. 1 (1966).

CALIFORNIA DIVISION OF OIL AND GAS

VACCARO AREA

MOUNTAIN VIEW OIL FIELD

Kern County

LOCATION: See map sheet of Mountain View Oil Field

TYPE OF TRAP: Faulted homocline; lithofacies variations; sand buttressing against older high

ELEVATION: 450

DISCOVERY DATA

Zone	Present operator and well name	Original operator and well name	Sec. T. & R.	B & M	Initial daily production		Date of completion
					Oil (bbl)	Gas (Mcf)	
Chanac	Texaco Inc. "Capital-Vaccaro" 1	The Texas Co. "Capital-Vaccaro" 1	36 31S 29E	MD	133	90	Sep 1955
Cattani	Kenneth M. Byrum & Dwight E. Byrum "Arvin" 1	General Petroleum Corp. of Calif. "Arvin" 1	26 31S 29E	MD	44	N.A.	May 1937
Houchin	Ancora-Verde Corp. "Union-Signal-Ancora-Tipton-Stockton" 42-35	Verde Enterprises, Opr. for Ancora Corp. "Union Signal-Ancora-Tipton-Stockton" 42-35	35 31S 29E	MD	133	100	Oct 1959
Derby	Ancora-Verde Corp. "Kovacevich" 63-35	Mariposa Co. "Kovacevich" 63-35	35 31S 29E	MD	100	50	Oct 1956

Remarks:

DEEPEST WELL DATA

Present operator and well name	Original operator and well name	Date started	Sec. T. & R.	B & M	Depth (feet)	At total depth	
						Strata	Age
Ferguson & Bosworth "Union-Signal Tipton-Stockton" 57-34	Same	Apr 1959	34 31S 29E	MD	11,711	Basement (schist)	Lt Jur (?)

PRODUCING ZONES

Zone	Average depth (feet)	Average net thickness (feet)	Geologic		Oil gravity (*API) or Gas (btu)	Salinity of zone water (gr/gal)	Class BOPE required
			Age	Formation			
Chanac	7,400	150	e Plio-lt Mio	Chanac	36	N.A.	III
Cattani	7,100 - 7,400	400	e Plio-lt Mio	Chanac	34	N.A.	III
Houchin	8,000 - 9,100	200	late Miocene	Santa Margarita	32	N.A.	IV
Derby	8,400	100	Miocene	Fruitvale	35	N.A.	IV

PRODUCTION DATA (Jan. 1, 1973)

1972 Production			1972 Proved acreage	1972 Average number producing wells	Cumulative production		Peak oil production		Total number of wells		Maximum proved acreage
Oil (bbl)	Net gas (Mcf)	Water (bbl)			Oil (bbl)	Gas (Mcf)	Barrels	Year	Drilled	Completed	
13,052	3,609	7,108	60	4	793,715	568,241	65,177	1949	24	13	130

STIMULATION DATA (Jan. 1, 1973)

Type of project	Date started	Cumulative Injection - Water, bbl; Gas, Mcf; Steam, bbl (water equivalent)	Maximum number of wells used for injection

SPACING ACT: Applies

BASE OF FRESH WATER: 2,900

CURRENT CASING PROGRAM: 10 3/4" cem. 700 - 900; 5 1/2" combination string landed through zone and cem. through ports above zone and across base of fresh-water sands.

METHOD OF WASTE DISPOSAL: Evaporation and percolation sumps.

REMARKS:

REFERENCES: Matthews, J.F. Jr., Arvin and Vaccaro Areas of Mountain View Oil Field: Calif. Div. of Oil and Gas, Summary of Operations--Calif. Oil Fields, Vol. 47, No. 1 (1961).

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF KERN

I am a citizen of the United States and employed in the County of Kern, State of California and my business address is 1405 Commercial Way, Suite 130, Bakersfield, California 93309; I am over the age of eighteen and not a party to the within entitled action.

On **June 15, 2015**, I served the following document(s) described as: **DECLARATION OF GORDON M. SCHLITZ IN SUPPORT OF BENNETT PETROLEUM, INC.'S PETITION TO REVIEW CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD'S MAY 15, 2015 ORDER PURSUANT TO CALIFORNIA WATER CODE SECTION 13267 AND TO RESCIND, CANCEL AND WAIVE REQUIREMENTS OF SAID ORDER AS TO PETITIONER** on the interested parties to said action or through their attorneys of record, by placing a true copy thereof in a sealed envelope, addressed as shown below, by the following means:

X **By Electronic Filing Service** - Complying with California Code of Civil Procedure §1010.6, I caused each such document(s) to be electronically served on the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
E-Mail: waterqualitypetitions@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Ron Holcomb
E-Mail: Ronald.Holcomb@waterboards.ca.gov

Central Valley Regional Water Quality Control Board
Attention: Clay L. Rodgers
E-Mail: Clay.Rodgers@waterboards.ca.gov

X **By First Class Mail** - I caused each such envelope, with first class postage thereon fully prepaid, to be deposited in a recognized place of deposit of the U.S. Mail in Bakersfield, California, for collection to the addressee(s) shown below, following ordinary business practices.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
P.O. Box 100
Sacramento, California 95812-0100

X **By Personal Service** - I caused each such envelope to be personally delivered by hand to the addressee(s) shown below:

Central Valley Regional Water
Quality Control Board
Attention: Ron Holcomb

Central Valley Regional Water
Quality Control Board
Attention: Clay L. Rodgers

1685 "E" Street
Fresno, California 93706

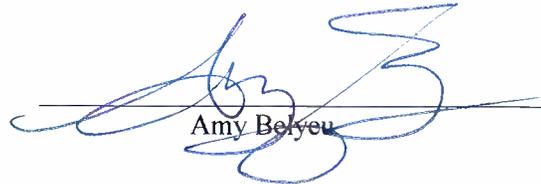
1685 "E" Street
Fresno, California 93706

X

By Facsimile Transmission - (Where permitted) I transmitted a true copy thereof (without Exhibits, where applicable, pursuant to *Instructions for Filing Water Quality Petitions*) by facsimile transmission from facsimile number (661) 631-2427, to the interested parties to said action at the fax number(s) shown below.

State Water Resources Control Board
Office of Chief Counsel
Adrianna M. Crowl
Facsimile: (916) 341-5199

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am employed in the office of a member of the Bar of this Court at whose direction the service was made. Executed on **June 15, 2015**, at Bakersfield, California, County of Kern.


Amy Belyeu